

**W2NPT**

The Resonator

Official Newsletter of The Fair Lawn (NJ) Amateur Radio Club**Volume 3, Number 8****www.FairLawnARC.org****August 2018**

From The President:

Dear FLARC Members,

We aren't slowing down even though everyone is busy enjoying their Summer! In August we have Vintage Equipment night, trip to Edison Labs, license exams, and the North American QSO party. See the new Groups.IO calendar from the webpage for details on these events.

Fred W2AAB and George W3EH are now giving their CW classes so please pay attention to emails from them if you are involved related to class schedules.

Now that Field Day has passed, focus on enhancing the club's operating positions and antenna infrastructure will resume. Stay tuned and any progress will be announced as updates are made.

Brad - KM2C
FLARC President

Member(s) Profile

NAME: **Steve Rosman** CALL **KA2YRA**

I've been licensed over 30 years, though my active time seems to mirror the low points in the sunspot cycle. Coupled with operating QRP must prove I welcome a challenge ;-)

What do you do/what did you do for a living?

I am currently a Manager, Solutions Architects for a leading wireless provider. In that role I help design and implement complex solutions for Healthcare and large corporate clients integrating our network, devices, and applications by working closely with our account teams, internal resources, and OEM/developers. I have been with this company in a variety of sales and technical roles for over 22 years.

My prior work was in retail and computer electronics sales and management, as well as sales promotion and distribution.

How did you get interested in ham radio?

Have always been interested and intrigued by science, electronics, communications, and especially radio and TV. Strings were run from apartment to apartment for our tin-can telephone network.

I got my first shortwave radio when I was in 5th grade. It was a Lafayette HE-60 4-band receiver purchased at the flagship store in Syosset, NY. I still have the original box, though not the radio. Am always on the lookout for one at ham fests, garage sales, and on-line. The closest I was able to get so far was an HA-226 in good working and physical condition.

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Member Profile (Continued)

I was fascinated by being able to listen to stations from around the world with a box that glowed in the dark and a wire strung out the second floor window of our garden apartment. QSL cards from my W P E 2 L J D SWL call sign were sent and received from a wide range of countries.

It took me almost 20 years to finally get my license, and yes, it was CW that delayed me. I found a great Elmer, Lance Aue, now an SK, in a club on Long Island who was awesome with getting me over the hurdles. I practiced and practiced and soon passed the 5WPM for Novice then the 13WPM for General earning call sign KA2YRA which I've held ever since.

I actually proposed to my wife from the radio club building, and she accepted!

I had a used Kenwood TS-520SE and a vertical antenna on the 2nd story roof of our apartment in Queens. Moved to Rockland county soon after and now operate primarily a Yaesu FT-817ND and loop antenna in a highly restrictive HOA. A lot of times I operate portable and mobile from various parks and summits. Also work with DMR and UHF/VHF, and a bit of satellites. Have been hooked big time by FT8.

I'm now working on upgrading to Extra and getting proficient again in CW.

What parts of the hobby most interest you?

- Experimenting, improving performance, building antennas
- Portable and mobile operation
- Digital and remote communications
- **Public service (see page**

What does belonging to FLARC mean to you?

How do you/can you better contribute to the club?

To me, FLARC represents a great resource of amazing diversity. Despite the classic line "I would never join a club that would have me as a member," I try to be as active and involved as possible.

Member Profile (Continued)

I am always ready to share what I can. I am always learning something as well as making great friendships with the folks I've met here.

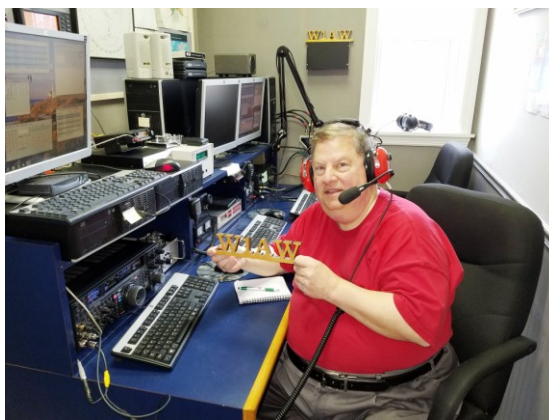
What should be the club's priorities in the next year?

- Make more time available for access to the club's resources. It can be challenging if not impossible to operate one of the stations, or use the workbench during a club night when the room is packed
- Expand HF and digital learning
- Host sessions on related topics such as DMR, 3D printing, remote operations
- More events such as field operating and tours/site visits
- Continue the awesome speaker series!!!

To what other ham related clubs or organizations do you belong?

- ARRL
- BARA (as soon as I send in the membership form ;-)

Continued on page 29.



Steve KA2YRA



The Club

Fair Lawn ARC is the fastest growing ham club around, with five operating positions in a permanent clubhouse. Visitors and guests are always welcome. The club is open every Friday night from NLT 6:30 PM. Business meetings are the first Friday of the month at 7:30PM.

2018 Officers, Committees and Assignments

President	Brad Kerber	KM2C
Vice President	Lowell Van't Slot	W2DLT
Treasurer	Al Rasmussen	WA2OWL
Secretary	Randy Smith	WU2S
Trustee	J Cooper	W2JC
Trustee	Skip Barker	KD2BRV
Trustee	Don Cassarini	N2PRT

Field Day	Steve Wraga	WA2BYX
Member Services	Judith Shaw	KC2LTM
Publicity	Ed Efchak	WX2R
Publicity	Gene Ottenheimer	WO2W
Publicity	Susan Frank	W6SKT

Program	Lowell Vant Slot	W2DLT
Publicity	Karl Frank	W2KBF
Publicity	Brad Kerber (ex officio)	KM2C
Social Media	Dave Marotti	NK2Q
Video/YouTube	Thom Guida	W2NZ
VE Liaison	Gene Ottenheimer	WO2W
VE Liaison	Pete Senesi	KD2BMX
Education	Gordon Beattie	W2TTT
Education	Randy Smith	WU2S
Education	John L. Howard	KD2NRS
Education	Fred Wawra	W2ABE
History	Gene Ottenheimer	WO2W
History	Fred Belghaus	W2AAB
History	Ed Efchak	WX2R
Photographer	Don Cassarini	N2PRT
W2NPT Trustee	Paul Cornett	W2IP
Technical	Paul Cornett	W2IP
Technical	Randy Smith	WU2S
RACES Director	Dave Gotlib	KD2MOB
RACES Liaison	Steve Wraga	WA2BYX

Newsletter Editor **Ed Efchak** **WX2R**

FL Town Liaison **Gene Ottenheimer** **WO2W**

Net Scheduler **Brian Cirulnick** **KD2KLN**

Fair Lawn RACES Corner



There has been quite a bit of activity at the Fair Lawn Radio Amateur Civil Emergency Service (FL-RACES) over the past couple of months. Here is a brief summary of our happenings: The By-Laws and Constitution were approved by the Fair Lawn Office of Emergency Management and that was followed by the election of officers. The elected officers are as follows for the two year term:

President -	Dave	KD2MOB
Vice President -	Steve	WA2BYX
Secretary -	Karl	W2KBF
Treasurer -	Ed	WX2R

On Wednesday, July 11th at 1900 hours, the second FL-RACES Net took place. David KD2MOB was the Net Control Operator. The Fair Lawn ARC Repeater was used (RX 145.47 MHz / TX 144.87, PL TX Tone 167.9 Hz). Our next FL-RACES Net will take place on Wednesday, August 8th at 1900 hours. Thank you to the Fair Lawn Amateur Radio Club for permitting FL-RACES for letting us use the repeater.

Here is another achievement - FL-RACES has a call sign - **KD2QFQ**.

The volunteer efforts of our members are very much appreciated. All of the events noted above could not have happened without you.

Our monthly meetings take place right after the FLARC business meeting. Please join us for the next FL-RACES meeting.

As a reminder, the Bergen County RACES nets are held on the 2nd and 4th Wednesdays every month at 1945 and various towns host these nets throughout the year. Two repeaters are utilized for these nets - Paramus, NJ (RX 146.79 / TX 146.19, PL TX Tone 141.3) and Franklin Lakes, NJ (RX 146.79 / TX 146.19, PL TX Tone 162.2). The Franklin Lakes repeater is the primary repeater.

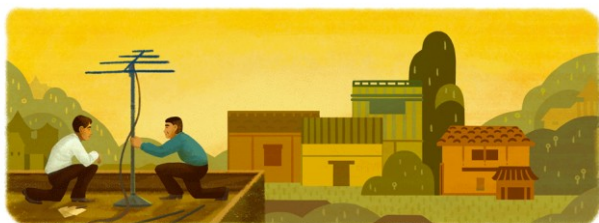
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MASTER EVENT CALENDAR

August 17, 2018	Vintage Equipment Night (at the Clubhouse)
August 18, 2018	Field Trip To Edison National Laboratory in West Orange
August 18-19, 2018	North American QSO Party SSB
September 14, 2018	Barry Cohen (K2JV) "QRT-500 The Final Transmissions from UK Coastal Distress Watch Stations"
September 15-16, 2018	NJ QSO Party
October 19, 2018	Ken Neubeck WB2AMU "6 Meter Operating During A Low Sunspot Cycle"
October 21, 2018	Fair Lawn Street Fair (River Road)
October 27, 2018	Field Trip To Thomas Edison Center, Menlo Park
November 16, 2018	Andrea Slack (K2EZ) "The Art and Science of VHF Rovers"
November 23, 2018	FLARC Auction
December 7, 2018	FLARC Holiday Party and Annual Meeting
December 21, 2018	The State Of The ARRL (Speaker TBD)

Upcoming Activities

TBA	RSGB Propagation Workshop
TBA	W1TP Enigma Presentation w/Fair Lawn Public Library



Hidetsugu Yagi's 130th Birthday Google Doodle

Follow FLARC ON THE WEB

Facebook: <http://facebook.FairLawnARC.org>

Twitter: @FairLawnARC

Blog: <http://blog.FairLawnARC.org>

Youtube: <http://youtube.FairLawnARC.org>

Website: <http://FairLawnARC.org>

FLARC VEC Exams

Our next test sessions are scheduled for **Saturday, August 11th and August 25th** beginning at 09:00 at the Community Center. No advanced registration is required but always appreciated. The fee is \$15.00 (cash or check).

Please bring positive identification (license, passport, etc.), your original license and a copy, original CSCE and a copy (if credit is needed).

The full exam schedule is on the club calendar at the FairLawnARC.org website. For further information contact VE-Liason@FairLawnARC.org.

Please refer also to the "License Exams" link on the main website--

<http://testing.FairLawnARC.org>

**We appreciate your support of the Fair Lawn Amateur Radio Club!
This is your Club! Be part of it!**

Don't Forget! A Homework Assignment From Our Upcoming October Speaker

Our October 19th speaker will be Ken Neubeck (WB2AMU), one of the leaders in observing and using six meter propagation.

In preparation of his presentation, Ken suggests that we listen on six meters from this point in time until the first week of August, and even participate in the ARRL VHF contest on the second weekend in June, use or listen to six meters during Field Day, and the CQ WW VHF contest in July.

Typically, there will be some activity on the band around that time. Members should listen on 50.125 for SSB activity and if there are some into FT8 mode, listen on 50.313.

The summer months are when Sporadic-E activity occurs in force. Ken notes that he has recently had two consecutive days of skip into Georgia, Alabama and other southern states.

He suggests that we listen as suggested and take notes, the talk will be more relevant and there would be some discussion about what they heard on Six Meters.

Thanks and 73

KEN WB2AMU



WB2AMU speaking at Pacificon about six meter DX

2018 FLARC Speaker Series Locations:

SPEAKERS WHO ARE FLARC MEMBERS:
FLARC CLUBHOUSE

SPEAKERS WHO ARE INVITED GUESTS:
FAIR LAWN SENIOR CENTER

Get Direct With FLARC!

Here is a direct link to specific club info: just a click away!

<http://apparel.FairlawnARC.org>
<http://auction.FairlawnARC.org>
<http://blog.FairlawnARC.org>
<http://calendar.FairlawnARC.org>
<http://events.FairlawnARC.org>
<http://exams.FairlawnARC.org>
<http://facebook.FairlawnARC.org>
<http://membership.FairLawnARC.org>
<http://news.FairlawnARC.org>
<http://swap.FairlawnARC.org>
<http://tech.FairlawnARC.org>
<http://youtube.FairLawnARC.org>

NEW !

<https://groups.io/g/FairLawnARC>



July 2018 Blog Traffic

July was an impressive month in visitors and in page views... the highest month ever in page views and second highest in total visitors. Go figure. Here is the data:

	July 2018	July 2017	Change
Views	1,373	862	+59%
Visitors	621	282	+120%
Posts	15	13	+15%

And we continue to grow!! There is new content nearly every day so it's really worth the look to both FairLawnARC.org and the blog.

<http://blog.FairLawnARC.org>

Congratulations!

Pete (KD2BMX) reports the results of the July 7, 2018 FLARC VEC Amateur Radio Exam Sessions:

Total Number of Candidates served: 2

Name	Call	License Earned
Lawrence Maleszewski	KD2QFI	Technician
Mateusz Czwakiel	KD2QFJ	Technician

Pete (KD2BMX) reports the results of the July 28, 2018 FLARC VEC Amateur Radio Exam Sessions:

Total Number of Candidates served: 4

Name	Call	License Earned
Robin Howard	KD2QDG	General
David Haas	KD2QHJ	Tech
Ben McCabe	KD2QHI	Tech

Your Mailbox Is Full

And so is everyone else's it seems. Let's keep blanket correspondence to "members," etc. to a minimum and only for specific purposes. It's a waste of life energy to have to read and delete stuff that has no meaning or value to you. Read who sent you something and then reply appropriately -- not just blanket replies to all. Use the listserv where appropriate.

Fair Lawn RACES Corner (Continued)

If you are interested in joining the Fair Lawn RACES, please contact me. You don't have to be a Fair Lawn resident to be a part of Fair Lawn RACES.

For information regarding Bergen County RACES, please go to <http://www.bcnjraces.org>.

Thank you very much. Enjoy what's left of the summer and 73.

Club Apparel Is Here!!

Club apparel is always in vogue. Red is always in and your club friends all have them... you *want* a shirt or jacket for the next FLARC event!

Don't forget.... they're easy to order.

Go to www.hamthreads.com or visit <http://apparel.FairLawnARC.org> to **check out the item selection that is posted on the FLARC website (with pictures and prices).**

Order the shirts or other items you want with either the regular FLARC logo or the still-cool 60th anniversary logo.

Note:

RED is the primary and preferred club brand standard .



NEW!! Paul K2PJC shows off this FLARC shirt at the July Speaker Series. Now, does he look good or what!! TNX Paul!!

Something To Ponder

We reported a score of 5,320 for Field Day 2018 running under category 4A.

If this were last year, FLARC would have finished 16th overall nationally in the category and second in the Hudson Division.

Worth waiting until the holidays to find out how we really did!

FLARC CW Class Gets Underway

Fred W2AAB reported that the first class was held in the conference room downstairs. There were nine people in attendance -- Brad KM2C, John KD2NRS, Kevin K2KCC, Dave KD2JIP, Nomar NP4H, Fred W2ABE and Larry WA2ALY. There were two others, calls unknown.

The first session was a "listen only" class, to familiarize the students with the sound and rhythm of the letters, numbers, punctuation marks, and some essential prosigns.

George's (W3EH) class began on July 27th. Fred plans on having his next class the same day as the August meeting night, only early, before the meeting, say, 6:00 to 7:00. The class is quite informal. The intent is to reduce the stress on students, by making the experience as relaxed and friendly as possible.

BEQUEATHS AND DONATIONS

Planned gifts usually imply the family donation of amateur equipment to the club when someone has become a Silent Key. But it can be more. Club members might consider making a gift through a will or trust; gifts that help provide lifetime income to the club. Consult with your lawyer, estate planner or tax advisor if you feel such a gift is worthy.

About The Club

The Resonator is published monthly and is the official (and only) newsletter of The Fair Lawn Amateur Radio Club. FLARC was established in 1956 and has met continuously since inception.

The club meets every Friday at 7PM at the club station in The Fair Lawn Community Center, 10-10 20th Street, Fair Lawn, NJ. Business meetings are the first Friday of the month at 7:30 PM.

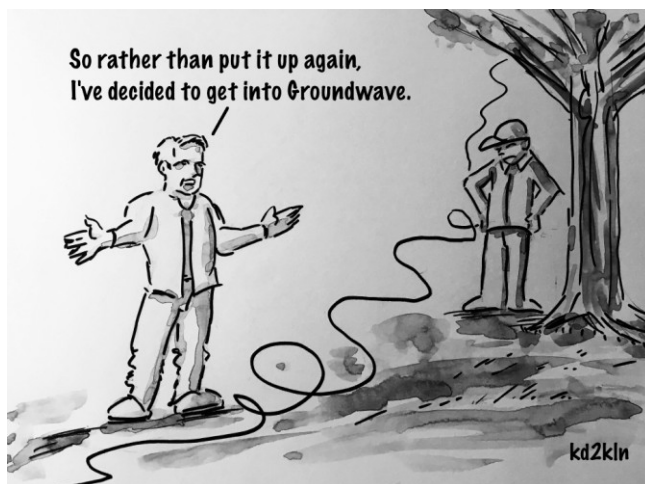
Visitors **ARE ALWAYS** welcome at our meetings.

FLARC operates the W2NPT repeater (145.470- PL 167.9) located high atop the Community Center. The analog repeater is open to all amateurs for use without restrictions.

The club has approximately 125 paid members. Dues are currently \$25 per year/\$20 for new members.

For more information, please see our website, at <http://membership.FairLawnARC.org>

Ham Lite by Brian (KD2KLN)



NEW! A new gathering place for club members has been set up on the Groups.io service ... Why another group? It has more features than our current WordPress 'blog' and allows members to select what and how they receive emails. This group might eventually replace our current blog. If you haven't signed up yet, check it out and sign up!

<https://groups.io/g/FairLawnARC>

Interested in Chasing DX?

A casual group of FLARCers including Van W2DLT, John KD2NRS, Brad KM2C, Karl W2KBF, Nomar NP4H, Steve WI2W, Larry WA2ALY, Fred W2AAB, and Jim W2JC have formed an email group to keep each other in touch in (real) time of when the rare or interesting ones show up to chase. Interested? See or contact Van W2DLT or Jim W2JC.



FAIR LAWN'S TECHNOLOGY HOUSE!



Past FLARC Member Profiles

Here is a list of past member features and we welcome your recommendations for new profiles -- including your own.

Month	Name	Call Sign
January 2016	Pete	KB2BMX
February	Marco	KC2ZMA
March	Ron	KC2TBD
April	Kai	K2TRW
May	Larry	WA2ALY
June	Dave	N8MAR
July	Steve	WI2W
August	Thom	W2NZ
September	Brian	KD2KLN
October	Brad	KM2C
November	Al	WA2OWL
December	George	W3EH
January 2017	Fred	W2ABE
February	Dave	KD2MOB
March	Randy	WU2S
April	Lee	KD2DRS
May	Gene	WO2W
June	Carol	KD2NMV
July	Kevin	KC2KCC
August	Robert	KD2NOG
September	Robert	KD2BKD
October	John	KD2NRS
November	Fred	W2AAB
December	Margaret	W2GB
January 2018	Brian	KD2OAZ
February	Bennett	KO2OK
March	Van	W2DLT
April	Aly	AL0Y
May	Bruce	NJ2BK
June	Dave	N2AAM
July	Karl and Susan	W2KBF and W2SKT
August	Steve	KA2YRA



August 17th Program Features Vintage Equipment Night At The Clubhouse

The August program features a rare look back at the earliest history of the club. Fred W2AAB will look to put together an on-air program featuring replicas of the original equipment used by the club in the late 1950's and 1960.

The program has been two years in the making and might be considered to be the last element of the 60th anniversary celebration.

Fred hopes not only to discuss the early station and equipment but also operate it -- a look back either novel or nostalgic depending upon your perspective. We will be looking to put out an APB to vintage operators so the sounds of AM and CW may be an interesting mix for the evening.

FLARC Does Sussex

A little rain did not dampen this year's Sussex hamfest and many FLARC'ers were in attendance.



Gordon W2TTT brightens a rainy hamfest and staying dry indoors.

The Near and Far Net

Now in its second year, the FLARC Near and Far net is chugging along each week. Here is list of our check-ins beginning on New Year's Night in no particular order. Mondays at 8PM on the repeater.

Name	Call
Gene	WO2W
Van	W2DLT
Thom	W2NZ
Steve	WA2YRA
Ed	WX2R
Fred	W2AAB
Karl	W2KBF
Brian	KD2KLN
Dave	NK2Q
Ron	KC2TBD
Dave	KD2MOB
Jim	W2JC
Mike	KC2ZX
Steve	WA2BYX
Robert	KB2BKD
Susan	W6SKT
Steve	WI2W
Brad	KM2C
John	KD2NRS
Art	WA2KXE
Brian	KD2OAZ
Brian	W2EMC
John	KD2NRS
Randy	WU2S
Jon	KD2PDS

More Elsewhere in The Resonator!!

August 2018 Net Controls

THANKS TO BRIAN KD2KLN FOR TAKING OVER THE ROLE OF SCHEDULING THE WEEKLY NETS!!!.

Remember the W2NPT FLARC repeater is at 145.470 (-) with a PL tone of 167.9. The net starts promptly at 2000 local time. Everyone is welcome.

Date	Net Control
August 6	WO2W
August 13	KD2KLN
August 20	WX2R
August 27	KD2MOB

2018 Edison Fest Continues... Now Also At Menlo Park!!

At the BARA hamfest we ran into Chuck (K2RRV) who also doubles as a tour guide to the Thomas Edison Center and Menlo Park Museum, separate from our August trip to the Edison Lab in West Orange.

Menlo Park was Edison's first laboratory and he later moved to West Orange to be closer to New York for business purposes.

We've set **Saturday, October 27th** as a day for a visit with Chuck leading the tour. Admission is \$5.00 and will be quite a complement to our earlier visit.

Let Ed (WX2R) know of your interest and we can take it from there.



Edison Monument at Menlo Park

Upcoming Contests

Always remembering that we are "casual" testers, the club participates in two upcoming events and invites operators both skilled and those desiring to be.

- **August 18-19:** North American QSO Party -- voice for us and lots of fun and
- **September 15-16:** New Jersey QSO Party -- voice and CW and a chance to meet a lot of old friends who want to stay in touch with NJ.

See Van W2DLT for details. No pressure -- lots of fun!

Zero Dollar Antenna Builds (Part Two)

by Brian Cirulnick KD2KLN

Last time, we built a very simple UHF antenna, mostly to get your feet wet in the world of Do-It-Yourself builds. This time we're going to build something more useful, but will be a bit more of a challenge to construct. However, once you have gathered the materials, this shouldn't take more than an hour of your time.

You are going to need the following materials:

- TWO wire hangers (18 inch long preferred)
- A scrap of wood about 10 inches long
- Two bolts (with nuts and washers) or wood screws (and washers)
- A piece of coax with your preferred connection at one end.
- Ideally, two crimp spade or eyehole connectors

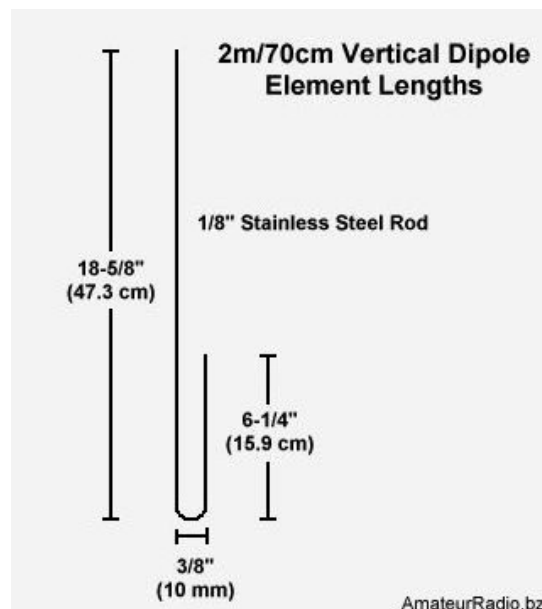
You should already have wire hangers in your closet. If not, any dry cleaning store should be able to provide those for zero cost. The scrap of wood is to use as a handle and also to mount the antenna to. If you can't hold it comfortably in your hand, either find a different scrap or start whittling away until you've got something you can use. Almost everything listed here should already exist in the average home, with the exception of the coax. [If you need a short length of coax, contact Jim W2JC]

The reason I suggest 18-inch hangers is that the 2-meter portion of the antenna needs to be 18 and 5/8th inches on each side, and I found that much easier to construct using the 18-inch hangers. Sure, you can use 16-inch hangers if that's what you've got; you're just going to spend more time straightening those out to the required length.

Using a ruler (or tape measure) as a guide, cut the hanger at the bottom on one end, then add 5/8th (which will be where the hanger folds upward), then add the UHF portion, which is 6 and 1/4 inches, (which is where the hanger nears the twisty "neck") and then cut the other side. To cut the metal, you can use a hacksaw or anything you've got that can cut. I personally used a big pair of wire-cutters, only cutting through halfway to avoid damaging the tool, and then bend the cut area back and forth until it 'snaps' free.

You can dispose of the remainder of that hanger (or keep for a future project); then cut the second hanger to the same dimensions. You then want to bend the hanger to approximate the dimensions as shown in the figure at right (thanks to AmateurRadio.bz). You can use whatever tools you have available. Pliers, a vise, the edge of a table you don't care too much about, your thumbs (if you are really strong!), or even a hammer (if you are very careful). Remember that the more exact you make it, the better it will perform, but don't sweat the details too much as we are making this for a handheld, which generally uses a much worse antenna (the dreaded "rubber duckie").

When you have two identical (or as close as you can get it) sections, remember to rub off the paint at the U-shaped folded end, using a file, or sandpaper, or a knife, or if you have none of those tools, run outside and scrape it against the sidewalk or road. You need to make those clean enough to ensure an electrical connection between the wire you're about to connect and the metal of the dipole pieces.



Zero Dollar Antenna Builds (Part Two) (2)

Now we're up to the fun part! Take your scrap of wood, and we're going to drill two holes (if using bolts) to mount each half of the dipole. If you don't have a drill or bolts, use two screws that can penetrate the wood and are big enough to hold the metal in place. This is where some washers may come in handy if you have them (another reason I prefer using washers – it spreads out the electrical connection surface area helping ensure that the signal gets into the dipole). One advantage of screws is you don't have to go all the way through the wood like you do with the bolts, but with the screws, be careful that you don't "strip" the threads you're essentially creating inside the wood, because you're going to have to back that out a bit to slip in the ends of the coax cable – so take it easy, do not over tighten!

I recommend placing the 440 sections facing away from the end of the wood you hold, it will reduce reflecting the signal back towards your body and improve the efficiency of the antenna. Things should start to look like the completed unit as shown in figure 3. You may want to wrap some tape around the sharp ends of the dipole/hangers, so when you're swinging this thing around, you don't poke anyone in the eye!

As with the last build, probably the most challenging aspect will be stripping and then connecting the coax and leaving yourself enough braided shield and enough exposed core to (hopefully) crimp on some spade connectors that you can then slip into each side of the dipole. If you don't have crimp connectors of any type, you can always go old-school and, by stripping more of the coax, you can wrap it around the bolt or screw, and then tighten down to provide the electrical connection between each end of the coax and each end of the dipole (and did I mention washers also make this easier?).

A note about the coax – you may not be able to obtain coax with an SMA connector, but BNC connected coax exists all over the place (and it's cheap). BNC to SMA adapters exist, and you can then use that to complete the connection between your build and your radio. [If you need the adapter in a hurry, contact Jim W2JC !]

And basically, that's it! You've now built yourself an omni-directional, dual-band vertical dipole antenna that will easily outperform any rubber-duckie on the market. This is a true "balanced" antenna because the counterpoise is the other half of the dipole that you connected the braided "shield" to on the coax. When you use a rubber duck antenna, your body acts as the counterpoise (when you hold the radio), and, no offense, but your body isn't a terribly good antenna.

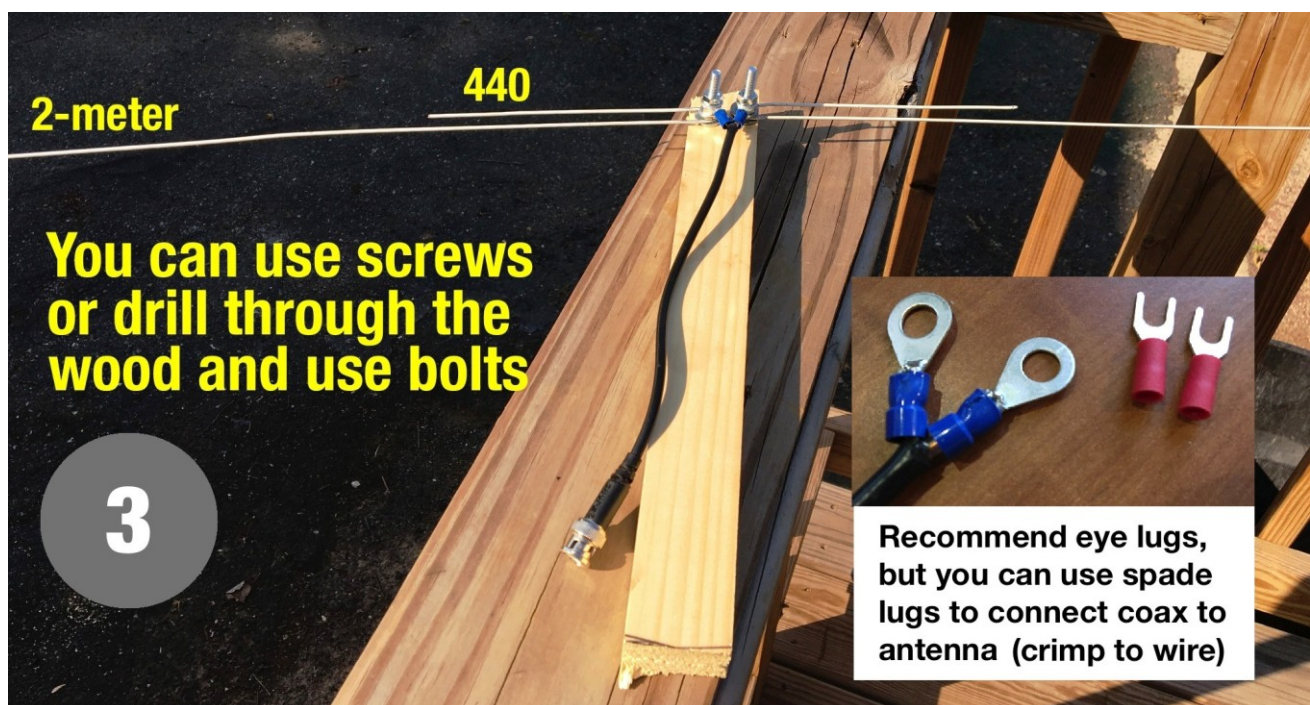
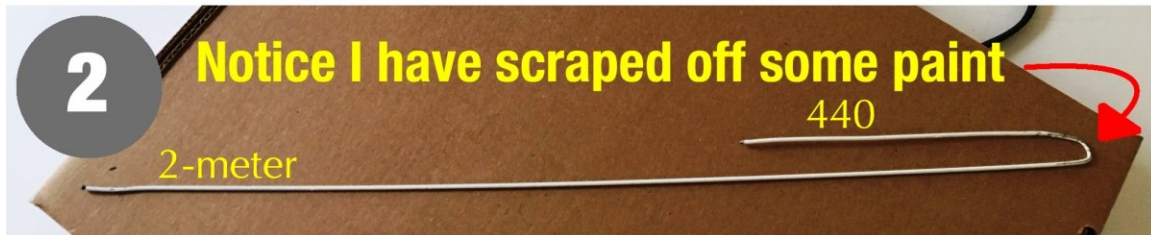
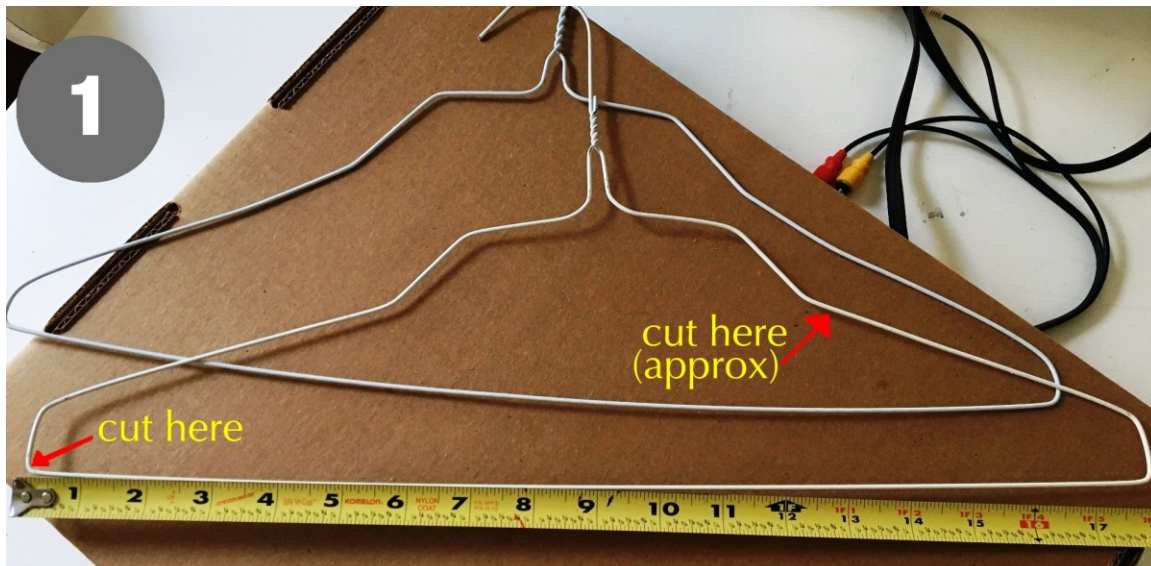
What I love about this design is that it is simple and effective. If you were to replicate this exact same design with slightly thicker metal components (brass rod is good for this application), and add some weatherproofing, this exact antenna could be mounted permanently outside to your roof as a "base station" antenna for any VHF/UHF radio.

Enjoy using your antenna, search for other plans on the internet, and then get creative about how to construct these other antennas with materials that you probably already have in your basement or garage. It doesn't take hundreds or even tens of dollars to build effective antennas if you are creatively thinking about how to replicate an existing design using zero-dollar materials! Be imaginative and look at the potential of junk towards realizing your antenna dreams.

Good luck and 73's!

Figures 1, 2 and 3 are on the next page.

Zero Dollar Antenna Builds (Part Two) (3)



Jeff Regan NJ5R Discusses Best Operating Practices At The FLARC July 20th Speaker Series

Jeff Regan NJ5R led a spirited discussion on operating etiquette at our July speaker session. With 43 members and guests in attendance the questions and discussion was one of the best so far at a FLARC program. Jeff is the President of the Tri-County Radio Association and we've made some new friends at the same time. Jeff noted "I had a great experience at the Fair Lawn ARC. Everyone was interested and involved. There was good interaction with the group, it was fun and the certificate was an unexpected surprise. Thanks once again for the opportunity."



Jeff NJ5R leads the presentation and discussion.



A mid Summer crowd of 43 FLARCers and guests attended.



L to R: John KD2NRS, Fred W2AAB, Dave KD2MOB and Steve WI2W.



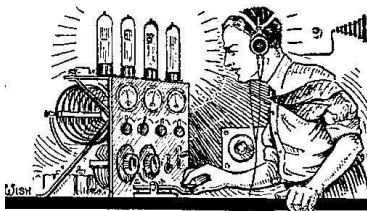
Ed WX2R and Van W2DLT present Jeff NJ5R with our thanks!



Jeff NJ5R listens to the discussion.



Many Tri-County members were also in attendance.



The Way We Were -- The Art Of The QSL (Part 1)

By Fred Belghaus W2AAB

This month we begin a multi-part series on QSL cards, their origin and evolution through amateur radio history

Image from May, 1926 QST, courtesy ARRL

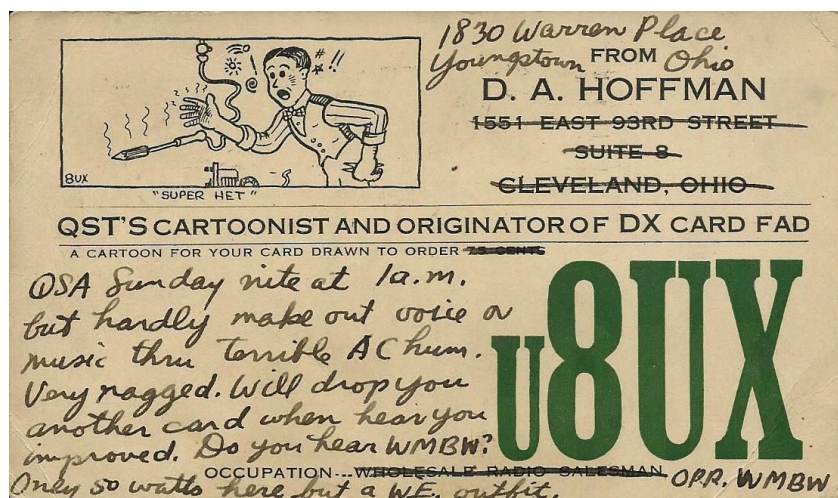
There's an old adage in amateur radio that says, "The final courtesy of a QSO is a QSL." Another is, "If it isn't worth a QSL, it isn't worth a QSO." Personally, I love the things. After many years of operating, chasing DX and contesting, as well as completing quite a few sometimes long-winded ragchews, I've accumulated many thousands of them. Each one is a treasure to me, for it is tangible proof of real communication that once took place between me and another human being, even if that communication was only a short exchange of signal reports that meant a new DX entity worked and confirmed.

Often, the mere mention of a call sign, even if that call has not been heard on the bands for decades, will conjure up images of their QSL, and with it, memories of the person behind that call sign, their characteristic voice or CW "fist," their rig, operating habits, quirks, and other details.

QSLs provide credit for an almost limitless number of operating awards. Some of these are for working USA counties, states, grid squares, provinces, states and counties in foreign countries. Some certify that a number of special event stations have been worked; others, for working members of a certain radio club. In most cases, the award sponsors require real, printed QSLs as proof of contacts.

QSLs can be very simple, prosaic things, little more than a call sign scrawled across a postcard in magic marker, or typed on a sheet of paper, or they can be flashy, expensive extravaganzas with color photographs of monster towers and beams at some big contester's superstation. Some of the most interesting ones are literally works of art, uniquely drawn or painted by their operators.

Although no one can state with absolute certainty who invented the QSL card, evidence exists that the earliest known written confirmation of a QSO was sent by station 8VX, Buffalo, New York to station 3TQ, Philadelphia, in 1916. (1) In 1919, D.A. Hoffman, 8UX of Akron, Ohio, sent confirmations with the standard data including date, time, frequency, etc. (2) The first European QSL is credited to "Bill" Corsham, 2UV in England in 1922. (3) Here's a 1927 QSL card from Hoffman, 8UX...



The Way We Were (2)

Hoffman was the official cartoonist for QST Magazine during the 1920's. His technique was simple, but effective. The card shows a young ham letting go of a hot soldering iron, obviously after having grabbed the wrong end, complete with the suggestion of expletives coming out of his mouth.

Hoffman would later end his association with QST, to be replaced in the 1930s by the famous Phil Gildersleeve, W1CJD, who had a career that lasted more than thirty years with that publication. Gildersleeve also operated his own "Cartoon QSL" printing business, about which more will be said in a later column.

Here are two cards from 2UV (later G2UV) from the 1920s and 1960s...

104 HARLES DEN GARDENS, LONDON, N.W.10. ENGLAND.

To Radio. 6 HR. of NIL Your 10W Sigs Received Stgth. R. 7 Date 15.3.25
 QRM. QSS QRN. QSS Wave Length 470 Remarks Worked

(ARRL) (Station Particulars at G2UV) (RSGB)

RECEIVER:
 Single Loose Coupled Tuner..... A.F. Det and A.F. LF Remarks.....

TRANSMITTER:
 Ten Watts { 10W ✓ I was using 3 when you Worked me
 CW ✓
 RADIOPHONE ✓
 Input 200 Volts at 1.5 Milliamps. Day cable Own Circuit 193 Radiation 25 Amps.

AERIAL. **EARTH.**
 Five Wire 3 Height 40 Feet Counterpoise. Height 12 Feet
 Length 7.0 Feet Five Wire Flat Top. Length 10 Feet

Radiophone Call—
 Two Uncle Vic, London.

D X
 United States of America, Belgium, France, Holland, Denmark, Switzerland, Luxemburg, England,
 Ireland, Scotland, Wales, All Parts, and ITALY, FINLAND, SWEDEN, GERMANY, PANAMA, CANARY ISLES.
 PSE QRM? and QSL by Card. Cul. 73s Om. Operator—W. E. F. CORSHAM.
 Traffic Manager, R.S.G.B., T. & R. Section.

Source: G4UZN website

G2UV **W. E. F. CORSHAM - G2UV**
 (Two Uncle Vic - Wembley)
 RSAS - GCRAS - ARMS
 W.A.C. & W.B.E. (Certified) Member R.S.G.B., R.A.O.T.A., R.S.H.
 CW & TELEPHONY - ALL AMATEUR BANDS
 Constantly Active Since 1921

Q.R.A.
 "Harrow View," 143, Abbots Drive,
 Wembley - Middlesex - England
 Telephone (Arnold 2727) 01-904-2727

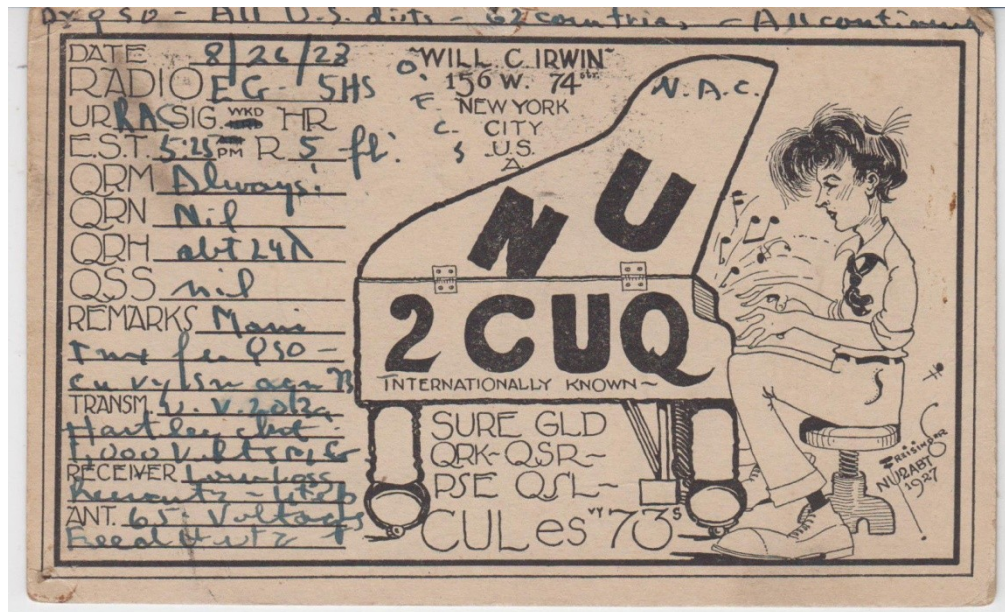
Radio enthusiast since 1913. Prizewinner first successful Transatlantic tests (1921) Member of first RSGB (T & R) Committee. Issued first authentic QSL Card in Europe. Exchanges signals with all Continents. Founder-Secretary and Vice-President, London Members Luncheon Club.

TO RADIO WA3DMH in Penna TKS QSO OF 29 Sept 1968
 YOUR CW SIGS WERE R 4 S 6 T 9 AT 0032 GMT
 ON 20 metres FREQ 140.75
 RECEIVER 6 valve Super ANT 20ft high 20ft long
 TRANSMITTER 100 Watt (the Brew) ANTENNA Inducted Vee 60ft long 40ft high

REMARKS
TKS QSO + QSL Earl on
nice to have met you and
here's to the next hdx 73° Bill

The Way We Were (3)

One of the most popular categories of QSL Art is the cartoon format. These originated in the 1920s, and are still seen occasionally, today. Here's one...



The card is from 2CUQ of New York City, and dated August 26, 1927. The operator, Will C. Irwin, is believed to be William C.K. Irwin, (1907-1998).

William C.K. Irwin studied with British composer Percy Grainger, before becoming associated with the Manhattan School of Music. He was introduced to George Gershwin in the 1920s, and would subsequently join Gershwin and Oscar Levant for piano improvisations in Gershwin's apartment. Gershwin then introduced Irwin to songwriter Irving Berlin, with whom he maintained a professional relationship for six years. Berlin could not read music, so Irwin wrote the notes down for him. He later became musical director on such Broadway productions as *Oklahoma!*, *The King and I*, and *South Pacific* in the 1940's. In the 1960s, he became the choral director for the Radio City Music Hall, later becoming staff composer and music director, before retiring in 1979. (4)

This card is an example of why I cherish QSL cards, especially old ones like this. They sometimes include an interesting back story that breathes life into an otherwise lifeless piece of paper. But why is there that strange "NU" appearing before Irwin's call?

The "NU" reflects the practice in those days of using an "intermediate" before the call sign. "N" stood for North America, and "U" for United States. In the early 1920s, when CW replaced spark, signals traveled far enough reliably to cross national borders, thus causing confusion as to the origin of the station.

The call 2AA, for example, could have been issued in the USA, Canada, Mexico, England, Spain, etc., so it became necessary to use, unofficially, an "intermediate" identifier. First, all USA calls were preceded by the letter "U" for United States, and Canadian calls by the letter "C." But then, Uruguay used "U," and China used "C," so next, a second letter was added, signifying the continent. Hence, a USA station now became "NU," a Canadian, "NC," Uruguay became "SU," but China, for some reason, became "FC." The use of "intermediates" finally ended effective October 1, 1928, when official national prefixes were adopted and mandated by international agreement.

The Way We Were (4)

Some cards featured hand-drawn artwork, especially in the form of cartoons. One particularly intriguing one comes from the operator of station 6EB in California. This station was operated by Lyndon Seefred of Los Angeles. Lyndon and his brother Howard, 6EA, later became W6EB and W6EA, and rose to fame in amateur radio circles as among the country's most prominent DXers. The "Seefred Brothers" were often referred to in QST during the 1930s and '40s for their DX achievements, along with another famous DXer by the name of Don Wallace, W6AM, about whom more will be told later.

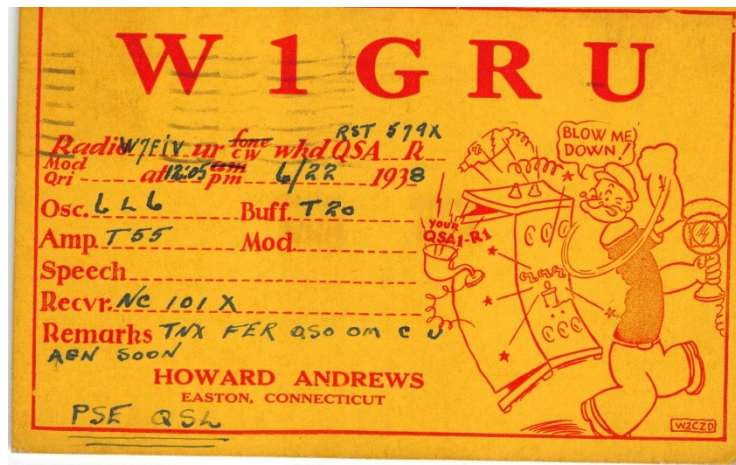
Lyndon drew a comic QSL and sent it to fellow amateur 6GE in 1926, poking fun at another amateur, 7SG, which is reproduced below (from eBay)...



Not bad work for an "amateur cartoonist," as well as amateur radio operator, but I wonder what the victim of Seefred's barb, 7SG, might have thought of it?

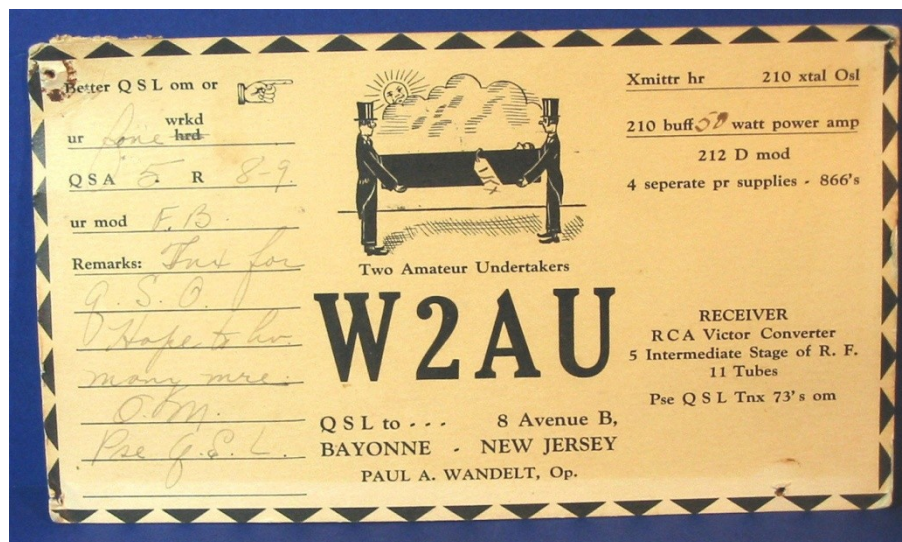
The Way We Were (5)

Sometimes, popular newspaper cartoon characters appeared on QSL cards, the figures adapted to their purposes. One example of this employed "Popeye the Sailor" on this card from W1GRU in 1938...



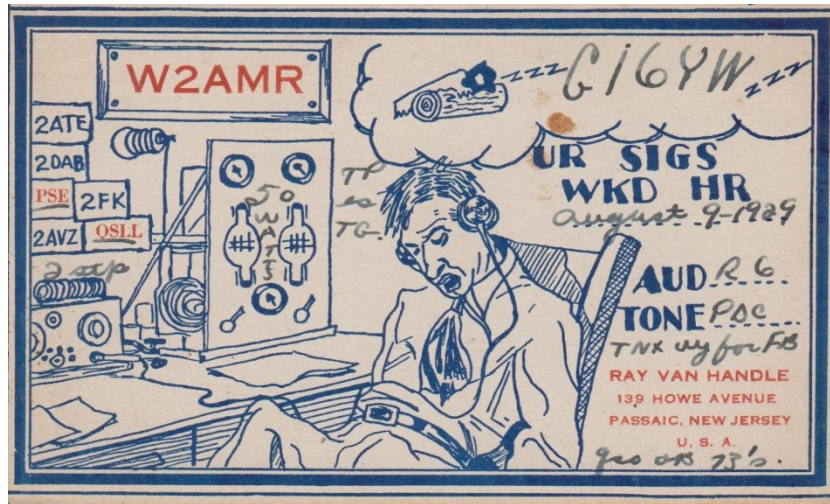
Most hams today have heard of the "W2AU Balun," a product of a company originally in Unadilla, New York. The "W2AU" refers to its original designer, Paul Wandelt, W2AU. Not many people today remember that Wandelt was originally from Bayonne, New Jersey, long before he became famous for his balun.

Here's a cartoon rendition of his QSL from 1931, a play on his made up phonetics of "2 Amateur Undertakers."



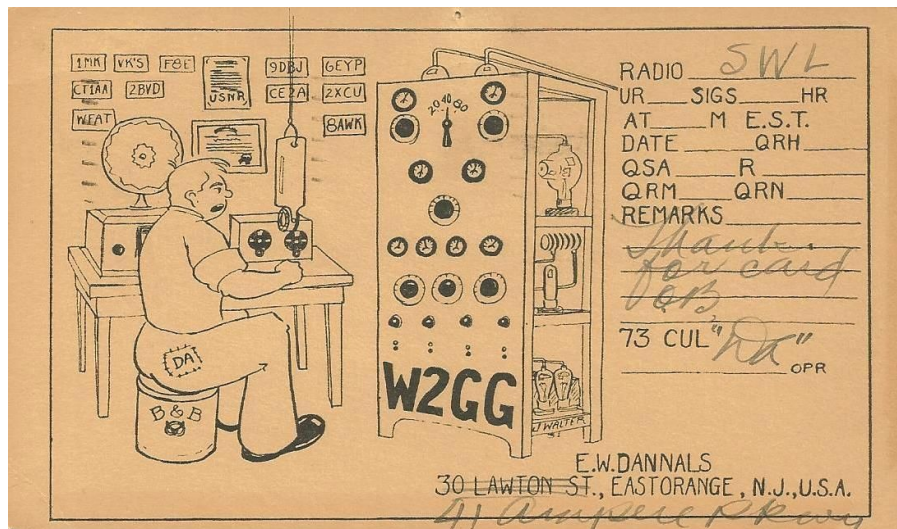
The Way We Were (6)

Here's a 1929 card from local ham Ray Van Handle of Passaic, then W2AMR, and much later licensed as W2BAI...



Note that one of the QSLs on the wall is that of W2ATE, Harry Frecker, a chemist who once lived on Park Avenue in Fair Lawn. Another call shown is W2DAB, John Reynolds, formerly of Passaic, who later moved to Paramus.

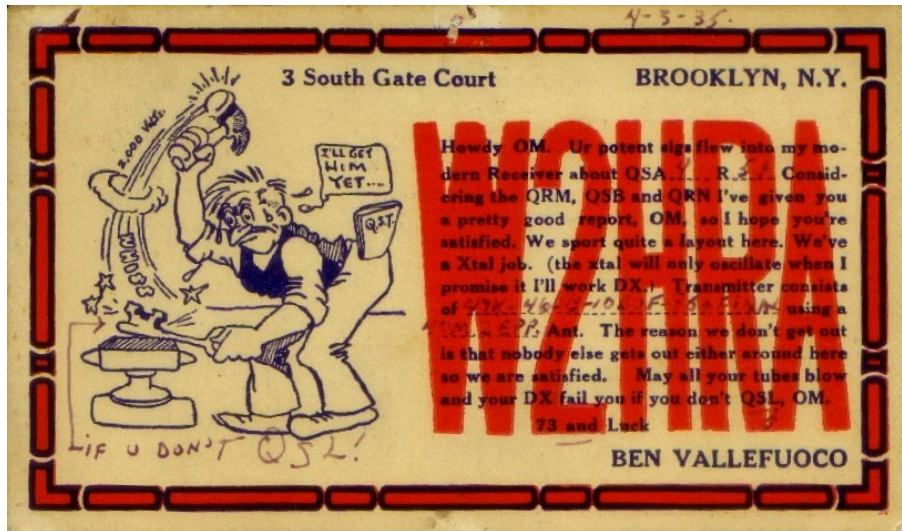
Earl Dannals, W2GG, then of East Orange, sent out this QSL in 1933...



If the name Dannals sounds familiar, it should. Earl was the father of Harry Dannals, originally W2TUK and later W2HD, who served several terms as ARRL President. In a later part of this series, Harry Dannals' specially designed QSL card will be featured, in an installment devoted entirely to the artwork of the famous and highly collectible cartoonist Otto Eppers.

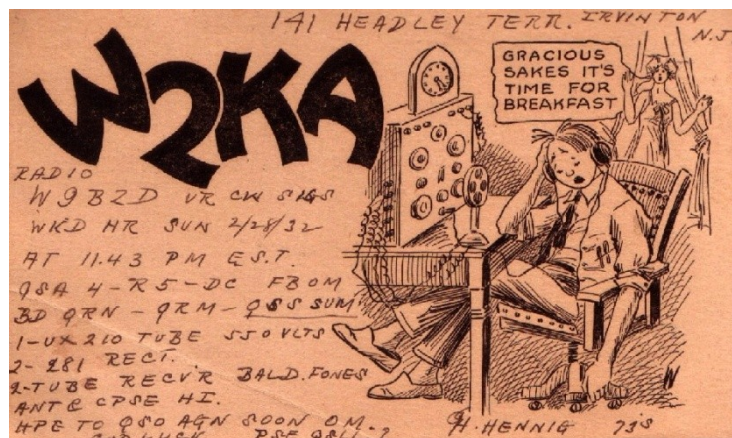
An unusual cartoon card was produced for Ben Vallefuoco of Brooklyn, New York, operator of station W2HRA. The card dates from 1935, and the image is a play on the expressions "pounding the key" or "pounding the brass," that means to send CW on a straight key. The artist's technique is similar to that of Otto Eppers, but the drawing is unsigned, so his identity is unknown...

The Way We Were (7)

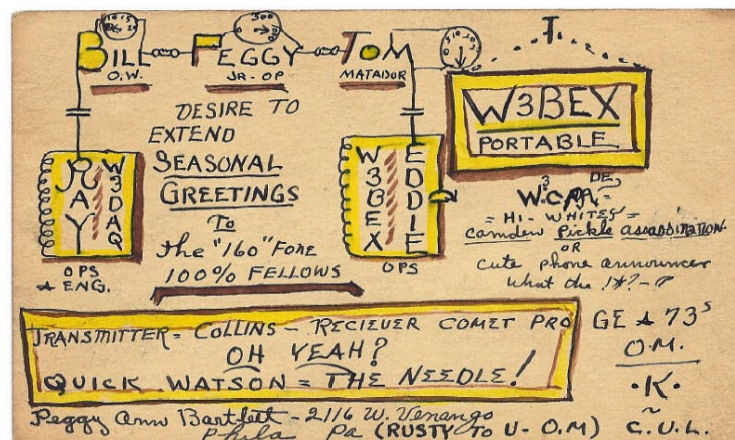


Source: Author's collection

Hams can sometimes overdo their enthusiasm for operating, especially when young, and a common cartoon theme was showing the operator in his “shack,” being remonstrated by his mom (or wife) for spending too much time at the rig. Here’s one dated 1932, from W2KA in Irvington, New Jersey...



Humor comes in other forms, as attested to by this unique and inventive hand drawn QSL from YL operator Peggy Ann ("Rusty") Bartlett, W3BEX, operating portable in Philadelphia, in 1931...



The Way We Were (8)

This was apparently a family of hams, active on 160 meter phone, a once very popular band, and one of only two bands on which “Class B” (General Class) amateurs were permitted to operate on phone besides 5 meters in the 1930s.

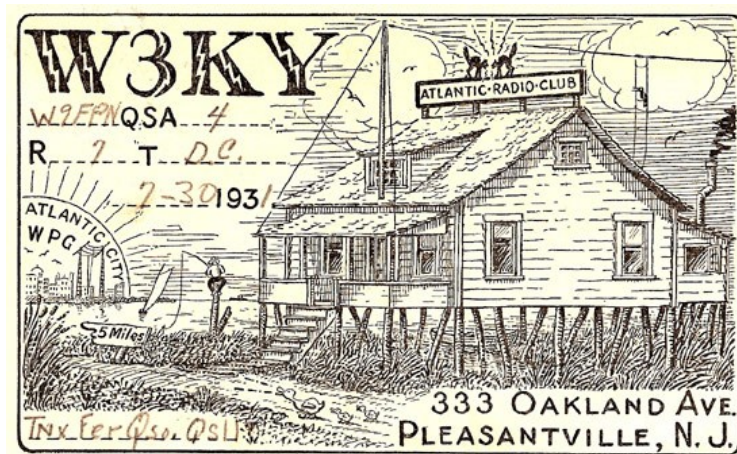
Note Peggy Ann’s list of equipment as “Transmitter – Collins – Receiver – Comet Pro,” two very top of the line pieces of ham gear in the 1930’s, and priced far beyond the reach of most hams during the Depression. Beneath these items Peggy writes, “Oh yeah? Quick, Watson, the Needle!” a reference to Sherlock Holmes’ alleged expression following the conclusion of *The Hound of the Baskervilles*, a particularly trying case for the great detective, and in this context, suggesting that their owning such expensive equipment would mean such a thing was highly improbable, unless one were hallucinating from being on drugs!

Actually, the expression does not appear in the original Conan Doyle story! It really comes from a 1906 operetta entitled, *The Red Mill*. To make matters worse, in the 1939 movie, *The Hound of the Baskervilles*, the phrase becomes

“Oh Watson, the needle,” thus adding to this misconception. (5)

Prior to World War II, all amateur call areas except W1, were somewhat different. For example, most of northeastern New Jersey was as it is now, in W2 land, but western and southern New Jersey were in the W3 call area. Morris County was in W3, along with eastern Pennsylvania, Delaware, Maryland, and part of Virginia.

Here’s a beautifully executed line drawing on the 1931 QSL of station W3KY, which was located in Pleasantville, New Jersey, near Atlantic City...



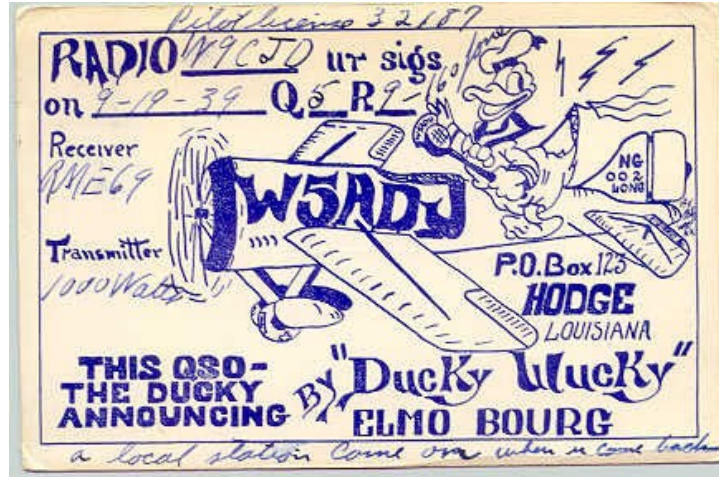
According to the 1931 Callbook, W3KY was licensed to the Atlantic Radio Club, with Carleton Thrasher listed as “Chief Operator.” Thrasher’s personal call was W3BDO.

The clubhouse is built on “stilts” to raise it above floodwaters. The reverse of the card refers to “QRM on the roof,” as illustrated by two cats squaring off for a fight in the picture. The station’s center-fed antenna uses open wire line, with a bird perched on one of the spreaders. In the foreground, a family of what appear to be ducks saunter by. At left is a reference to radio station WPG with two towers and a multi-wire center-fed flat-top antenna, once located on the Steel Pier at Atlantic City, and which later became WFPG.

The Way We Were (9)

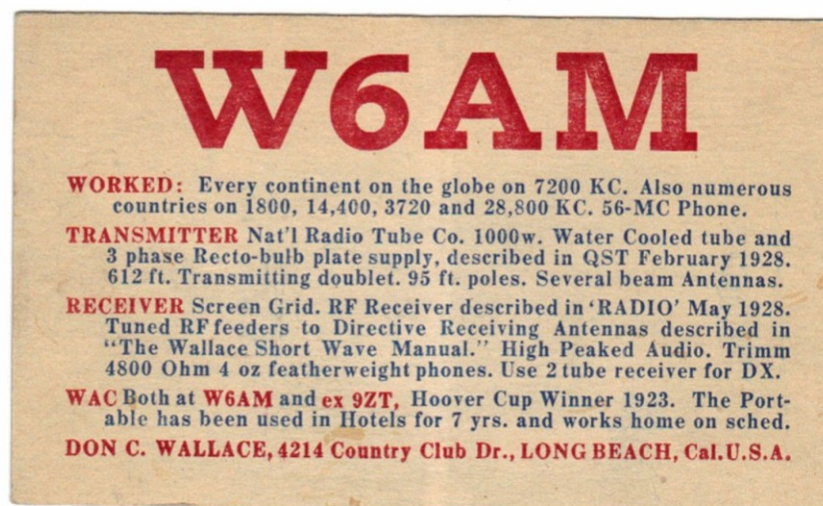
The artist/engraver is unknown, and there is no discernible signature on the drawing, but it is an example of the kind and quality of workmanship that was once commonly available in the making of a memorable QSL card.

From W5ADJ in Hodge, Louisiana, Donald Duck makes his appearance in 1939, as pilot of a single engine airplane...



One can only guess at the significance of "Ducky Wucky," but it seems to be the operator's nickname, origin unknown.

In the 1930s there were several amateurs who would become world famous for their successes as DXers. The Seefred Brothers, already mentioned, were overshadowed by one of the most legendary DXers of all time, Don Wallace, W6AM. Here's one of Don's cards from 1934 which, although it displays no artwork, instead exercises his right to do a little bragging...

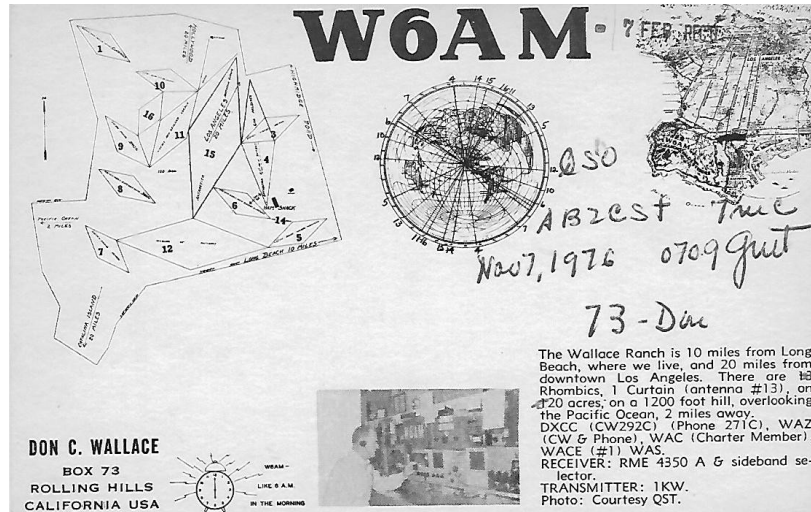


Note that he worked all continents on 40 meters. That was on CW, when the 40 meter band was exclusively a CW band. It wasn't opened to phone until the early 1950s. On a 1937 card, too large to reproduce here, and showing a massive tower to the left, Don lists his station equipment:

The Way We Were (10)

“Transmitter: Federal Telegraph Company, water-cooled tube and 3 phase plate supply described in QST February, 1928. Several beam antennas.... Receiver: Tuned RF feeders in ‘The Wallace Shortwave Manual,’ Trimm 24,000 ohm impedance 4-Oz featherweight phones. RME-69 receiver. Mobile: 50 watt automobile transmitter, 58 Mc. Towers: 171 feet (Front), 107 feet (Rear).”

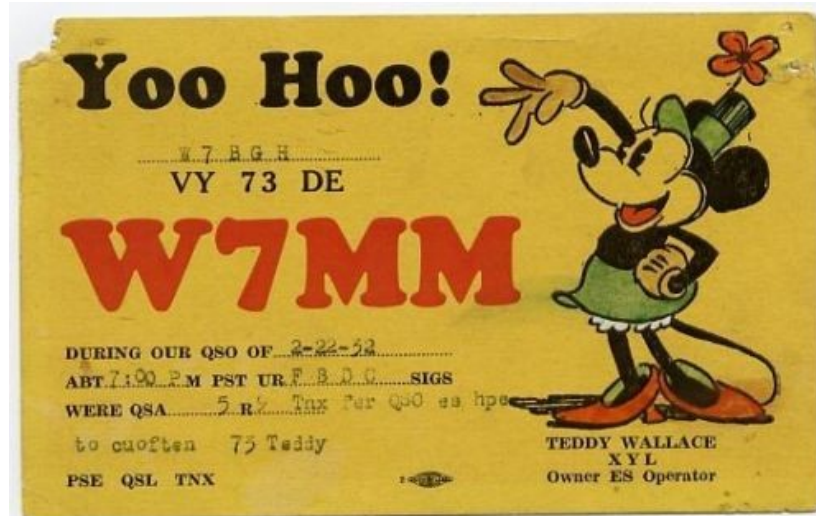
Don goes on to list his operating achievements: “WAC” (Worked All Continents) both at W6AM and ex-9ZT. Hoover Cup winner, 1928.” Later, Don would install a huge antenna farm consisting of rhombics pointed at virtually every corner of the globe, mounted on telephone poles. Don was a successful sales representative for electronics manufacturers. I worked him years ago...



Source: Author's QSL file

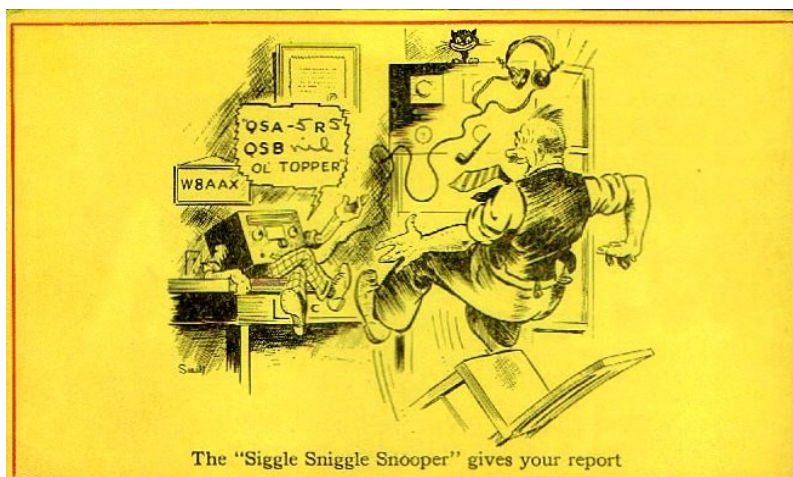
This card dates from 1976. The “Wallace Ranch” was 20 acres of land (originally 120 acres) on a 1,200 foot hill overlooking the Pacific Ocean, two miles away. A bird’s eye view of Don’s antenna farm can be seen at left, with a small image of a clock marking 6:00 AM below, a pun on his call, 6AM, and a photo view of Don in his shack at bottom center. Don had 9 rhombic antennas and one “curtain” antenna (no metal beams or quads), yet he worked the world many times over. His KW amplifier helped, too.

So far, we’ve seen Popeye and Donald Duck on QSL cards, but here’s a unique example of yet another cartoon character. Minnie Mouse appears on the 1932 card of YL operator “Teddy” Wallace, W7MM....



The Way We Were (11)

I can't make out the name of the artist is on this 1934 QSL from W8AAX, but it is quite striking in impact....



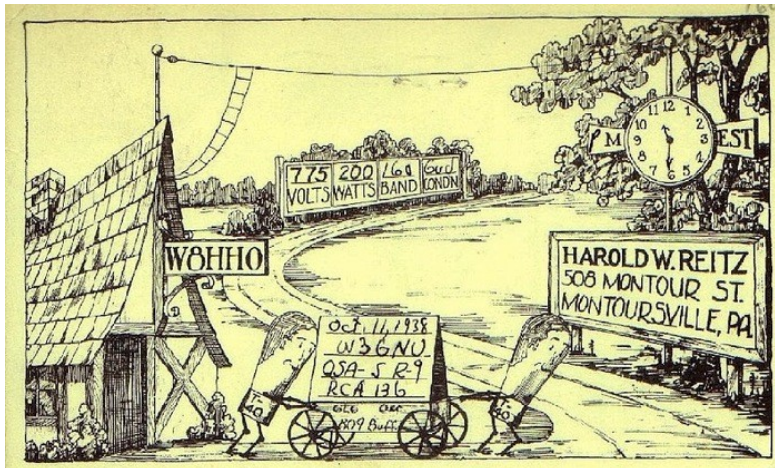
The "Siggle Sniggle Snooper" is a pun on the then prevalent term for a "Single Signal Super" (Superheterodyne) receiver, meaning a superhet with enough selectivity to hear only one signal at a time. This was before the days of advanced filter technology to sharpen selectivity even more.

Frank Lucas, than W8CRA in Canonsburg, Pennsylvania (later W3CRA), was a very prominent DXer since the early 1930s. Here is a rare, somewhat risqué card of his from 1936. The artist is unknown.



The Way We Were (12)

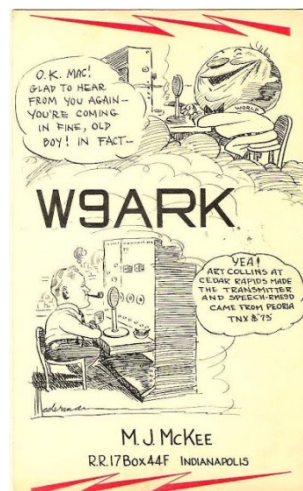
From Montoursville, Pennsylvania (also in W8 land in those days), comes this beautiful work on the QSL of W8HHO. The year was 1938....



In a flight of fancy, W9AGK portrays a fellow ham eagerly pursuing him (as a flying insect) with a net, from 1932....



This 1935 card from W9ARK includes some fine draftsmanship by an artist whose signature, alas, is too small to read....



The Way We Were (13)

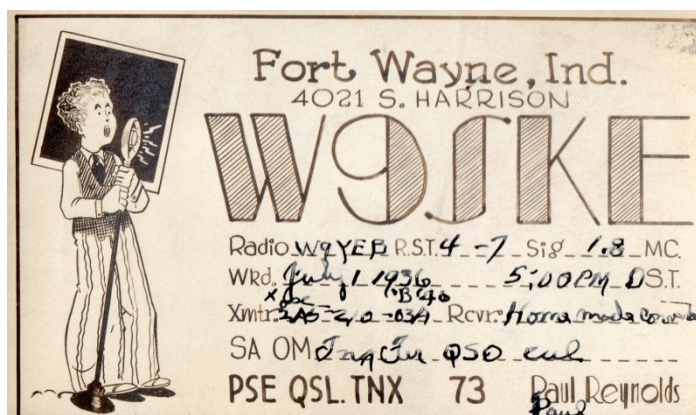
Often, a nickname forms the theme for a pictorial QSL, like this one from E. Earl Harden, W9FMX. This 1931 card portrays "Ye Kansas Jayhawk," in the days when Kansas was part of the W9 call area....



From W9NTI of Iowa, also in W9-land then, comes this 1937 card promising "No Bull."



Popular culture is frequently reflected on pictorial QSLs, and this one from W9SKE of Fort Wayne, Indiana portrays a typical "crooner" of the day, in 1936....



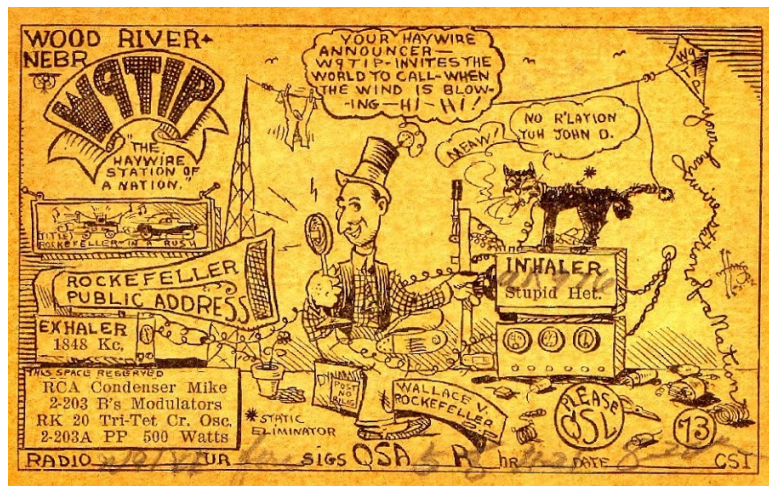
The Way We Were (14)

George Vesely, W9SKR offers this unusual cartoon card of himself, from 1938....



The receiver shown at left, with large “horn” speaker on top, is the once famous National FB-7 series. The FB-XA version was the deluxe model, which included a crystal filter for better selectivity. It looks like his neighbors are a bit agitated by his AM phone signal interfering with their broadcast band receivers, though. In later years, George would become a popular QSL card printer, who advertised in QST.

Here’s a rather elaborate cartoon card from W9TIP from sometime in the 1930s...

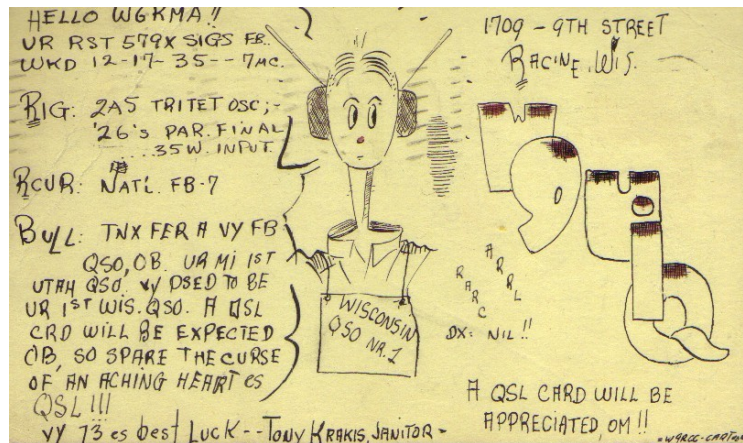


“The haywire station of a nation,” is his motto. The operator, Wallace Rockefeller, is sure to state on his card that he’s no relation to John D. (a prominent millionaire in those days).

Note also that Nebraska was in the W9 call area. By the beginning of World War II, there were no more W9 calls available, and ham radio was shut down for the duration. When licenses were reactivated in 1945, the FCC created the W-Zero area, and the previously issued W9 calls in those states were changed to W0, while new licensees were assigned new W0 calls.

The Way We Were (15)

Some of the most interesting cards feature hand-drawn graphics, either cartoons or self-portraits. Here's another unique card in that vein, combining both self-portraiture and caricature, this time from W9UIQ, dated December, 1935....



In future installments of this series, we will focus upon foreign cards of note, club cards, "clever cards," cards by Otto Eppers and Phil Gildersleeve, YL operators, and some cards that are truly beautiful works of art. I hope you enjoy the journey!

73,

Fred W2AAB

NOTES:

- 1) Wikipedia: "QSL Card." Available at: https://en.wikipedia.org/wiki/QSL_card
- 2) Ibid.
- 3) Ibid.
- 4) Wikipedia: "William C.K. Irwin." Available at: https://en.wikipedia.org/wiki/william_C_K_Irwin
- 5) "Sherlock Holmes quotes that Arthur Conan Doyle's Sherlock did and didn't say..." Available at: www.thisdayinquotes.com/2009/09/oh-watson-sherlock-wants-needle-quick.html



ED-itorial -- It's All About Relevance Isn't It?

Jim W2JC posted an interesting item from the [NOSSC blog](#) that discussed the seemingly perennial topic of how to get more youth engaged in our hobby. As with most clubs, we wring our hands and wonder why today's younger generations -- for many, now two generations behind most of us, don't find the interest or excitement that we did.

We at FLARC have some inherent advantages in helping to address the question. We have been encouraged with our local youth outreach (such as our recent visit to Westmoreland School in Fair Lawn) and plan to do more with Van W2DLT leading the local Fair Lawn initiative. Our club's demographics are (believe it or not) younger than a lot of other clubs in providing some potential role models and positive energy. There is the presence of the clubhouse itself which can lead to interest and possible inclusion. And, at the ARRL section level, there is the model of the 721st Mechanized Contest Battalion WC2FD (yes, a ham radio group for youth) headed by Nick K2RI and Rob KA2PBT.

So that raises two questions -- how do we engage with more younger adults (including students) and what do they see if and when we engage them?

The blog post (I urge you to read it) points out a number of different potential touch points for outreach to the first question.

I've been thinking about the second question as well -- what do people see when they come to FLARC? I would argue that we are less contemporary than we think when it comes to our approach. The posts point out that a lot of items of interest such as SSTV, ISS and other satellite contacts, foxhunting, Raspberry pi, etc. that are hardly discussed nor practiced by the club. Interest groups such as QRP, antennas and experimentation related to technology, despite stated interest, also go unformed (despite an inventory of member interests). We default to that which we know and feel comfortable. Let's call it our 62 year old DNA.

So what's the answer? Work on the "inside" of the club to tap unmet areas of member interests and resources. Work on the "outside" to attract those "youth" that we feel are under-represented. And understand that what brought you into the club is probably not what brings a younger, more diverse prospect today.

Not so easy but essential to maintaining a relevant club.

DE Ed WX2R

Member Profile (Continued)

What else can you tell the club about yourself and/or ham radio?

I am the very proud father of two sons who are each married to wonderful women, and the grandfather of an almost 2-year grandson, with another due in November.

I'm the former president of the local chapter (Lower Hudson Valley, NY) of **Mended Hearts**, currently Communications Coordinator, Newsletter editor, and accredited visitor.. See <https://mendedhearts.org/> for more information.

Mended Hearts is a national and community-based non-profit organization that has been offering the gift of hope to heart disease patients, their families and caregivers. To offer this hope Mended Hearts provides a variety of programs.

Mended Hearts is the largest peer-to-peer heart patient support network in the world. It has been offering hope and support for 65 years, visiting more than 200,000 patients every year providing education, support and hope to all types of heart patients and their families. Mended Hearts and Mended Little Hearts has 300 chapters in North America, serving 460+ hospitals.

Mended Little Hearts is the largest CHD peer-to-peer support network in the world. CHDs are the most common birth defect, affecting nearly 1% of all births in the U.S. – 40,000 babies each year.

Mended Little Hearts works nationally and in communities to provide peer-to-peer support, education, awareness and connect families with needed resources. Mended Little Hearts volunteers provide direct support to families through its Accredited Visiting Program and delivering 5,000 Bravery Bags annually.



Theoretics Demystified

What is one of the earliest types of devices for turning sounds, voice in particular, into electrical impulses to be used and or amplified for communication or recording purposes?

If you said the carbon button microphone you are the winner! It was invented for use in the telephone and is simply a voice variable resistor.

You can take a carbon microphone, and earphone with a resistance of 1k to 3k and a battery, hook them up in series and talk into the microphone and hear your voice with the earphone. You could even substitute a small incandescent bulb for the earphone and watch it flicker as you talk. Just keep the current low or you could fuse the carbon granules together and that would ruin the microphone. Telephone circuits that use the mikes have those current limiting factors built in as part of their inherent circuitry.

Carbon microphones were also used in the early days of spark and those were water cooled to help avoid fusing of the granules.

The construction of a carbon microphone is such: there is a diaphragm which vibrates in response to sound waves, behind it are the carbon granules (think like sand) and these are contained in a small recess which groups them into the shape of a thick button. The electrically conductive diaphragm is in contact with the carbon granules and compresses and relaxes them in response to sound waves. The diaphragm and the granule containment recess both being conductive cause the carbon to be in series with the diaphragm and the containment recess and thus act as a sound variable resistor.

In a telephone type transmitter there is a gold flashed wide ring and a similar button in the center in the back of the microphone.

These are contacted by spring arm contacts in the telephone mouthpiece.

Modern telephones usually use a newer technology microphone, the electret.

DE Fred W2ABE

In A Nutshell

The summer is half over but the excitement at the Fair Lawn Amateur Radio Club is not! A group is going to the Edison museum in West Orange and the Morse code class is in full swing.

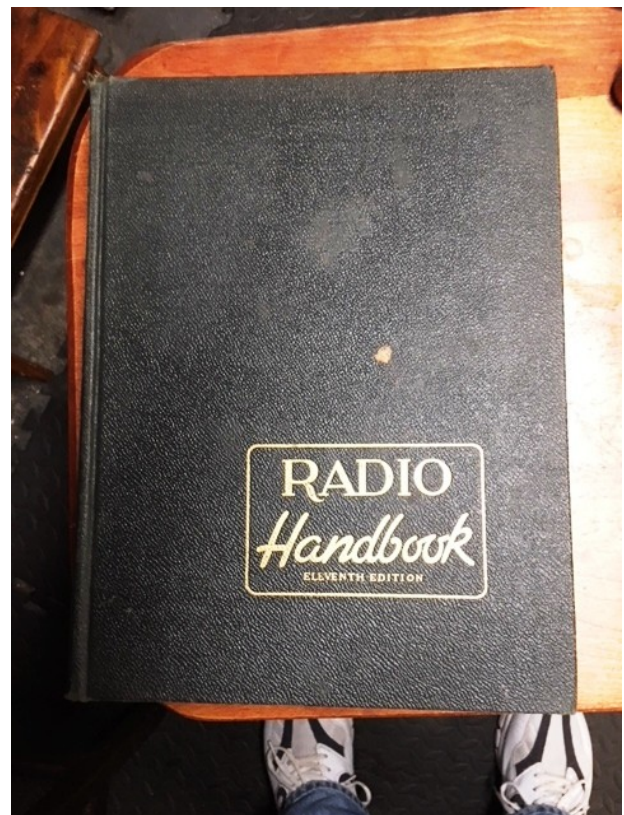
Antenna improvements at the club are coming soon along with other equipment improvements.

Just recently I was at an outdoor event and set up my Yeasu FT450 with part of Nomar's NP4H Buddipole antenna and he worked a station in South Carolina and I worked one in Ohio. We did it just for fun and that is what ham radio is all about.

DE Fred, W2ABE, 73.

Donations To The Club

Roge K2RRB has donated some old tomes and equipment to the club ... a sample is included below. Thanks Roge!



Circa 1930 Radio Handbook

August Meeting Notes

President Brad KM2C called the meeting to order at 7:30 p.m. The members rose and recited the Pledge of Allegiance.

Secretary Randy WU2S called the roll of officers and trustees and all were present except Trustee Don N2PRT. The meeting had a quorum to conduct club business.

President Brad KM2C asked if there were any visitors or new members present. Visitors Tom N2AXX and his son Ben KD2QHI introduced themselves. Ben recently passed his Technician license exam on Saturday at the FLARC VE test session. The members present congratulated Ben on his success.

Secretary Randy WU2S announced that he sent the minutes from the July meeting via email to members of record and published them in the club's newsletter, The Resonator, which is on the club's website at www.FairLawnARC.org. He asked the members present if there were any corrections or amendments needed. There were none so Skip KD2BRV moved to accept the minutes as published and Dave N2AAM seconded the motion. The motion passed by acclamation.

Treasurer Al WA2OWL presented this month's Treasurer's Report. Brian KD2KLN moved to accept the report as read and Judith KC2LTM seconded the motion. The motion passed by acclamation.

President Brad KM2C reported for the Tech Committee that the computer at operating position #1 has been upgraded to Windows 10, connected to the radio for rig control and has N1MM+ logging software installed on it. Jim W2JC noted that the computer at operating position #2 is used mostly for digital modes such as FT8. A program which works with the FT8 software automatically logs the contacts and sends them to the W2NPT QRZ.com log. Jim then transfers the log entries to the W2NPT Logbook of the World.

August Meeting Notes (2)

Gene WO2W asked about our progress on antenna improvements. President Brad KM2C said that he and Vice President Van W2DLT plan to identify and order the antenna parts in August and then schedule the installation work for September or October when the weather is cooler.

Jim W2JC reported for the Publicity Committee. Our Speaker schedule is:

- August 17: Fred W2AAB -
Vintage Equipment Night (at the Clubhouse)
- September 21: Barry Cohen K2JV -
QRT-500 The Final Transmissions from
UK Coastal Distress Watch Stations
- October 19: Ken Neubeck WB2AMU -
6 Meter Operating During A Low Sunspot Cycle
- November 16: Andrea Slack K2EZ -
The Art and Science of VHF Rovers
- December 21: ARRL Speaker TBD

We have several Field Trips planned:

• August 18: Field Trip to Edison National Laboratory in West Orange. We have about 24 people registered so far. We have room for a few more. If you're interested, please contact Ed WX2R via email. The logistics on travel to come. There is a \$15 admission charge. If you are unsure that Ed has you on his list also drop him a note.

• October 27: Field Trip to Thomas Edison Center, Menlo Park

Other scheduled events include:

• October 21: Fair Lawn Street Fair on River Road

Questions for the FLARC membership – please respond to Ed WX2R:

• What is the interest in doing Great Falls again next year? Any interest in an alternate Earth Day activity such as the DeKorte Environmental Center in Lyndhurst?

• Any interest in being part of a multi-club special event station such as at the Liberty Science Center?

Continued on next page.

August Meeting Notes (3)

FLARC Media Report:

- We saw record traffic this month for the club blog both in page views and visitors.
- A big thank you to all our newsletter contributors. We have another nice issue coming up
- Thom W2NZ reports our current month's YouTube statistics --
 - o We are now at 102 subscribers, with 6 signed up in the last 28 days.
 - o Watch time (over last 28 days) was 1400 minutes, down and expected as the 2nd Part of W2AEW upload is due.
 - o We had a channel total of 342 views over the month.
 - o The top 3 videos over the past 48 hours were Alan and Ria, tied for 1st or both in 2nd, lol - W3LPL holding 3rd with his RF Propagation Arc #1.

John KD2NRS reported for the Education Committee that the CW class is moving along nicely.

Secretary Randy WU2S reported some highlights from the Northern New Jersey Section meeting on July 14. Presiding at the meeting was Section Manager Rob KA2PBT, who was assisted by Hudson Division Director Mike N2YBB and Vice Director Bill W2UDT.

- Ed WX2R, the Public Information Coordinator (PIC) for the section asked the section and club leaders present about their interest in membership surveys and a media communication workshop. Ed recounted the successes which FLARC has seen with these activities.

- Bill W2UDT said that the annual Hudson Division awards dinner will be hosted by the Orange County radio club on November 3. He asked local clubs to submit nominees for the various awards. Tickets for the event will go on sale in September.

- Mike N2YBB reported on recent activities at the ARRL. The CEO search committee has interviewed 40 candidates and has narrowed the list down to three. The ARRL will roll out a new ARES program starting with an information gathering tool. The League needs better information on who is active in ARES. Contact Mike Corey at the ARRL for more information on the ARES plans to update training and operating skills.

August Meeting Notes (4)

- Mike N2YBB noted that the ARRL is focusing on lifelong learning programs to retain hams in the hobby. The people present discussed many ideas to aid retention.

- Mike N2YBB reported that at the recent ARRL board meeting the directors approved three changes to the bylaws. The first names the ARRL as the national association for amateur radio. The second change modified the election cycle. The third change addressed indemnification for directors and officers.

Jim W2JC noted that the FLARC Groups.io site (<https://groups.io/g/FairLawnARC>) is active and we need more members to sign-up and use this site. He said the calendar here is more informative and easier to use than the calendar on our web site at www.FairLawnARC.org. President Brad KM2C suggested that we look into making the calendar on Groups.io visible to the public if it is feasible. [Jim W2JC reports after the meeting that this has been done.]

Brian KD2KLN reported on the Monday night net activity. He asked for a volunteer to run the next net on August 6. Gene WO2W stepped up and will run the net. Brian will send the standard net control script to anyone who wants to take a turn as net control. The net starts at 8:00 p.m. every Monday on the W2NPT repeater (145.47 MHz). Access to the net is also possible by using Echolink if you are out of RF range of the repeater.

Gene WO2W reported that he, Jim W2JC and another new member made more progress on storing the remaining Field Day supplies. President Brad KM2C asked if we could organize a Saturday work party to organize more of our gear in the workshop area and move some of it to storage. Gene WO2W said that he will send out an email to members about this.

President Brad KM2C announced that FLARC branded shirts are available at HamThreads.com. You can specify where your name, call sign and FLARC logo appear on your shirt.

Continued on next page.

August Meeting Notes (5)

Vice President Van W2DLT announced that the North American CW QSO Party will be conducted on Saturday, August 4. He said that not all QSOs are at high speed so try making some contacts even if you are new to CW operations.

Vice President Van W2DLT said the club will be open for the North American SSB QSO Party on Saturday and Sunday August 19 and 20.

Vice President Van W2DLT noted that the New Jersey QSO Party will be on Saturday and Sunday September 15 and 16. We will open the club for the contest which starts at 12:00 noon on Saturday. Jim W2JC announced that we will use a special event call sign, **N2J**, for this event.

Vice President Van W2DLT announced that there are two picnics planned by Frankford Radio Club (FRC) members. If you are interested in contesting, these FRC events may interest you. The first is at the K2AX station in Hammonton, NJ on Sunday August 19. The second picnic is at the W2IRT station in Caldwell, NJ on September 16. Contact Van W2DLT if you are interested in going to either of these events.

Vice President Van W2DLT showed the members present the binder with the letters from the students at Westmoreland middle school. All present had an opportunity to see it.

President Brad KM2C said that he would follow up on contacting an instructor for a first responder training course.

President Brad KM2C asked about the state of our VE test sessions. Gene WO2W responded that the sessions are doing well and that the new Technician question pool is now in use.

President Brad KM2C announced that Marco KC2ZMA had previously donated three handheld VHF radios to FLARC with the understanding that they would be given to new Technicians. Jim W2JC suggested that we give the first to Ben KD2QHI who just passed his VE test last Saturday. All the members present agreed with this idea.

August Meeting Notes (6)

Fred W2AAB said that he needs to test a radio before Vintage Night on Friday August 17 and that he needs a 40-meter antenna for the event. President Brad KM2C said that Fred can test the radio on the dummy load this Tuesday while the work party is at the club. Brad said that he will supply a suitable 40-meter antenna for the Vintage Night event.

David KD2MOB announced that the Fair Lawn RACES club thanks FLARC for the use of the W2NPT repeater for its monthly net. David said that FL RACES received a club call sign of KD2QFQ from the FCC. There will be a meeting of FL RACES after the FLARC business meeting. David asked about the memorandum of understanding sent to FLARC. Secretary Randy WU2S responded that the MOU was sent to all members of the FLARC Council for review and that there has been no action yet. President Brad KM2C said that he would review the MOU and ask the Council for their views on it.

Jim W2JC announced that W2NPT received the Worked All States award from the ARRL. He noted that Fred W2AAB made the last contact we needed (with Hawaii) during the Field Day event. Jim presented the framed award to President Brad KM2C.

Steve WA2BYZ asked if we are going to have another Portable Day with BARA in the Fall. Steve W12W responded that BARA has the event scheduled for September 22. Gene WO2W will make arrangement to book Area A in Memorial Park for the event.

Fred W2ABE displayed a homemade code practice oscillator he made which has a suitable antique look to it.

Having no further business, President Brad KM2C asked for a motion to adjourn. Brian KD2KLN so moved and Judith KC2LTM seconded the motion. The members present voted in favor and the meeting was adjourned at 8:35 p.m.

Respectfully submitted,
Randy WU2S, Secretary

At The August Business Meeting

It's a family affair at the FLARC business meeting as newly licensed Ben (KD2QHI) and Tom (N2AXX) join the club. Welcome to both!!



L to R: Tom (N2AXX), Ben (KD2QHI) and President Brad (KM2C) with the HT he received as a result of Ben's new Tech license.

It took us only 62 years (!) but the club finally has its WAS award after Fred (W2AAB) bagged Hawaii and we made the submission. The club recognized the achievement at the August meeting.



Fred (W2AAB) and President Brad (KM2C) and the WAS plaque



At Deadline

Minutes of the FL-RACES Meeting, August 3, 2018

- The FL-RACES meeting was called to order at 8:38 PM by David KD2MOB, following the FLARC Business Meeting;
- Attendees were David KD2MOB, Susan W6SKT, Randy WU2S, Steve WA2BYX, Zach KC2RSS and Karl W2KBF;
- David reviewed the minutes from the previous meeting on July 6 and these were approved;
- David noted that the call sign KD2QFQ has now been issued to FL-RACES and that a draft Memorandum of Understanding between FL-RACES and FLARC has been sent to the FLARC Council for their consideration;
- There was a brief discussion of the need for FL-RACES members to demonstrate some evidence of activity (e.g. participation in nets, attendance at meetings and training) but no actionable decisions were taken;
- The group decided to apply for a vanity call for FL-RACES. David KD2MOB signed an application for KB2FLR with KC2FLR as our second choice and Karl W2KBF will submit this application;
- We decided that FL-RACES should plan training sessions in message handling and Net operations;
- The meeting was closed at 8:57 PM.

Respectfully submitted by Karl W2KBF,
FL-RACES Secretary

More At Deadline

After Winter storms, Jim's W2JC Hex beam is slowly on its way to restoration.

18 Near and Far net check-ins on August 13 followed by 15 and 14 the last two weeks. It has not been slow this Summer for sure.

Thanks to Brian KD2KLN for taking over the scheduling of net control ops for the Monday night net.

Is this newsletter the best club newsletter around? You bet it is. No boring Bouvet filler here. There is always room for more club news and contributors so let the editor know how you can help to make it even better.

Around the Shack

By Hal Kennedy N4GG

An Old Dog Checks Out a New Trick – FT8

FT8 has been all the rage for over a year, so I recently decided to give it a try. I had a specific reason too – getting a few more dB out of my station in pursuit of 6 meter DXCC. I've been licensed for 57 years, but I'm still just a kid with a soldering iron at heart. I try new things. You?

My experience with digital modes started with the original digital mode – Morse code. Or in technical jargon: OOK. (On-off keying). Samuel Morse came up with it in 1844. W2NPT taught it to me and it remains my favorite operating mode. As you can see by the date, Morse's code predates radio, which began around 1900. It was devised as a way to get the alphabet down a single telegraph wire. Telegraph schemes before Morse included having a wire for each letter of the alphabet (!) and having several wires that ran electro-magnets on the far end; the magnets being next to a compass and swinging the needle to point to a letter. Morse made telegraphy practical. Telegraphy is a French word by the way. Tele (distance) graphe (writing). Distance writing!

By 1966 I was deep into RTTY, including a basement full of Teletype machines along with home-brew vacuum tube TNCs (terminal node controllers – the circuit that changes RTTY tones into a drive signal for a Teletype machine). TNCs by the way convert two-tone RTTY back to OOK. You might ask if one tone is “on,” why we need a second tone for “off,” given that no signal or tone for “off” would work fine - like Morse code. It's because the “off” state is more certain if it's assigned a tone rather than simply being a lack of signal and represented by just the noise in the channel.

I mention all this because it's why I have investigated, by not tried, “new” digital modes until this year. The TNC has been replaced by a computer, and computers will now copy Morse's code, but the rest is the same as when I first discovered it. RTTY has moved from 850 cycle shift to smaller shifts and higher baud rates, but it's still just frequency shift keying converted to OOK. Many digital modes now use multiple tones (sometimes shifted in frequency and sometimes in phase) but it's all variations on a common theme. Been there, done that in 1966.

Then, along came JT65 and FT8. Those and several other modes are derivative of astrophysics work Joe Taylor, K1JT has pursued over the course of his career. Using forward error correction and a slew of other digital processing techniques, these new modes will copy signals below the threshold of what the human ear can hear, and that's both interesting and valuable. FT8 is, in my estimation, worth about 6 dB improvement over the human ear. So I tried it – in fact I've made about 1,000 FT8 QSOs at this point and given it a “fair shake.” I just worked some rare DX too – the Wake Island DX'pedition was easy to work on FT8. My impressions are mixed.

Getting rolling:

- It's easy to get started. The WJST-X software is a free download. On modern radios like the IC-7300, the interface is just a USB cable from the radio to the computer. Older radios may need two connections between the computer sound board and the rig.
- You can start without reading the instructions. Just play with it. After a few hundred QSOs I broke down and read the help files, which helped a lot! Talk to an “old hand” for operating tips. How to operate is out of the scope of this article.

Continued on next page.

Around the Shack (Continued) (2)

Impressions:

- There is about 6 dB to be gained over CW, which is a big deal when working DX, particularly on 6 meters, EME, etc.
- This was supposed to be a “weak signal” mode (not a low power mode) with power limited to only what’s needed. It’s not happening. You can tune to any of the established FT8 frequencies on any band and hear S9 and louder signals. It’s not being used as a weak signal mode by many operators.
- An FT8 QSO takes one minute when all goes well. That’s great for putting a new DXCC entity in the log but feels like it takes forever when you are working on HF with S9 signals both ways. That QSO could take 10 seconds on CW or SSB. It’s easy to tire of local, strong signal QSOs. There is no rag-chewing. Call signs, grid squares and signal reports get exchanged – that’s it.
- The one minute QSO time is too slow for medium to fast QSB when signals are weak. I have started many 6 meter QSOs never to finish because the signals faded out in less than a minute. The same on 160 meters. If you begin a QSO 2 dB above the FT8 noise floor QSB could easily take the signals to 1 dB below the noise floor in less than a minute - and then there is no QSO. Under some conditions CW is a better weak signal mode than FT8 because it’s faster.
- The mode is good for filling in states and grid squares. I never bothered to get WAS on 30, 17 and 12 meters. I am using FT8 now for that and my totals are quickly getting to 50.
- Just about everyone on FT8 is using LOTW.
- The agreed-to FT8 frequencies are getting overloaded. 20 or more FT8 QSOs will fit in the bandwidth of one SSB QSO, but there are thousands of FT8 signals on the air. More “watering hole” FT8 frequencies are needed now, and will come about over time. This has just happened on 6M. 50.313 was “the” FT8 frequency – it is now, by gentleman’s agreement, the domestic FT8 frequency with 50.323 reserved for inter-continental QSOs. There is plenty of room on 6M to spread out. But on 40M? I foresee spectrum competition trouble ahead. I strongly support using VFOs rather than locking down on “set” frequencies in the future. There is no need for set frequencies other than to make it even easier for the computers to find each other. Many people disagree. Point and click is now a popular operating “technique.”
- The automated nature of the QSOs doesn’t feel like ham radio to me. You click on the call sign of a CQ and the computers do the rest. I can easily catch up on email or read QST while my computer is making nearly all of each QSO for me. The software is set up to go to standby at the end of a QSO, so you do need to click your mouse, once, to start another contact. BUT, the FT8 software code is open source and sure enough, there is a version floating around where a smart programmer removed the standby-at-end-of-QSO feature in the code. Know what that means? You can hit CQ once and come back a month later to see how many QSOs your computer has made – with no interaction with you at all. This is ham radio?
- A DX’pedition mode exists as does a contesting mode. The FT8 software is being revised about once every two months at this point. This past week’s VHF contest saw a handful of stations in contest mode and the rest not. They are not compatible if there is no operator intervention and FT8 operators as a rule don’t intervene with the computer doing the operating. This is wrong on two levels. In DX’pedition mode one station can work many at a time. Or should I say one DX computer can work many other computers at a time?
- Logging software is struggling to catch up. Several popular logging programs are no longer supported by their authors – those require burdensome work-arounds to log FT8 QSOs. Integrating contest FT8 QSOs made on FT8 software (WJST-X) into everyday logging software can be okay or terrible trouble depending on which software you are using. This will shake out over time – it’s all still new and being tweaked, and tweaked, and tweaked.

Continued on next page.

Around the Shack (Continued) (3)

So, in summary:

- It's fine for chasing grid squares and states, and for weak signal work under some conditions.
- It's so automatic you are barely involved.
- It's wildly popular which has lead to QRM problems that are going to get much worse.

Do I recommend it? Yes. It's fun to try new things and it will help me finish WAS on the WARC bands and 6 meter DXCC. Meanwhile, I know quite a few hams who have tried it for a few months and gave it up. In the true sense – it's not operating a radio so much as it's operating a computer, and the novelty of that is, for me, ancient history. Also, while I am not a long-winded rag-chewer, I enjoy getting more than a grid square out of a QSO.

73,
Hal N4GG

The Wall Of Recognition Grows

The addition of the certificate of recognition from Congressman Gottheimer to the club is the latest addition to the club's wall of fame.



Dr. Barry Cohen K2JV Highlights Our September 21st FLARC Program With "*QRT-500 The Final Transmissions from UK Coastal Distress Watch Stations*" at The Fair Lawn Senior Center

What did early radio sound like? Dr. Cohen starts with history of the 500kHz system and the early Marconi stations. The discussion includes some interesting ships and examples of distress communications. The program concludes with the actual final CW transmissions between English, Irish and other European stations.

Barry Cohen was born in New York City and still maintains that he is a New Yorker. He was educated in the NYC public school system including the Bronx High School of Science. Barry continued his education at Brown University where he earned a BS degree in Electrical Engineering, and then at the Johns Hopkins University which conferred upon him the degree of Doctor of Engineering. During this period he also spent three years on active duty as an officer in the US Navy, holding the posts of Radar Officer, Electronics Officer and finally Navigator of a command and control flagship. During his Navy days he operated the Ham stations at many Naval Bases, including Treasure Island California, Pearl Harbor Hawaii, and the Air Force Base at Thule, Greenland.

His first Ham License was issued in 1945, W2PDG, and his first QSO occurred early in 1946, on 40 meter CW. He has been active, mostly on CW, ever since.

Upon graduation from Johns Hopkins, Dr. Cohen worked at Bell Laboratories Murray Hill for about 10 years. His research was on semiconductor devices and materials for use in high speed circuits. His most intriguing project was the development of the infrared solid state laser, a device used today in every CD and DVD player.

A Fulbright Fellow, Dr. Cohen founded Research Devices Inc. a New Jersey Corporation which manufactured and sold infrared and other equipment for manufacturing and failure analysis of semiconductor devices and integrated circuits.

Now retired, he works to establish ham radio related programs with school children, the Emergency Response Team established with NPARC, communications and space programs at elementary and high schools in New Jersey, and organizing communications for public events such as street fairs, road races, OEM exercises, Ham Radio summer camps, and others.

More New Check-In's For The Near and Far Net

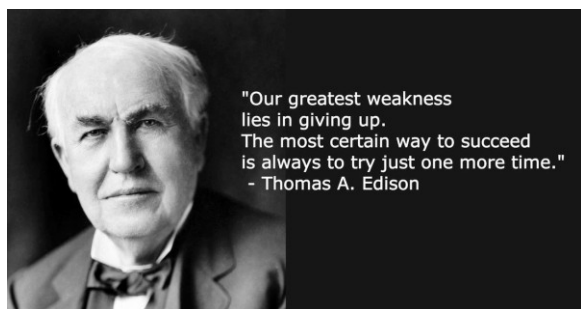
Our list gets longer so we need another page -- here are more check-ins to the Monday night *Near and Far* net.

Name	Call
Aly	AL0Y
Bob	N2HIP
Judith	KC2LTM
Fred	W2ABE
Paul	W2IP
Chris	W2TU
Stan	KC2K
John	K2BIX
Harry	KB3PQP
Paul	K2PJC
Noel	N2OEL
Tony	KA2TAM
Tommy	KD2OBY
Tom	N2AXX
Benjamin	KD2QHI
Marco	KC2ZMA

Come And Meet The Wizard (Of West Orange) on August 18th

The club is putting together a tour of the Edison National Historical Park (Laboratory) on **Saturday August 18th**. A guided tour is offered at 10AM and requires a minimum of 15 people with a maximum of 30. **The entrance fee is \$15.00.**

Let Ed WX2R know of your interest. So far we have about 20 signups... we can fit up to 30. Let Ed (WX2R) know if you'd like to be a part of it.



Recognition To WA2ALY

A tip of the FLARC cap to "Captain" Larry WA2ALY for earning the ARRL DXCC Challenge Award which is for working and confirming at least 1,000 DXCC band-points on any Amateur bands, 160 through 6 meters (except 60 meters).

This is recognition for years of dedication and perseverance in hunting DX and is achieved by few.

Congrats to Larry on for obtaining this!!



The DXCC Challenge Award

TNX KD2KLN for the pix

New Near and Far Net Scheduler

Last month Ed WX2R announced that he planned to relinquish his role as the "scheduler" of net controls for the Monday *Near and Far Net* beginning on August 1st.

Brian KD2KLN has graciously offered to take over this key club position... and we have added him to our club masthead -- congrats and thanks to Brian!!